CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, December 20, 1906.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.) and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue
Dec.				
*20	Bridge	Charleston, W. Va	P. & S.	12- 6
*20	Sluice gates	Cody, Wyo	S. & B. S.	11-15
*22	Steel derrick	Philippine Islands	S.	11-22
22	Cranes	Portsmouth, N. H	S.	11-29
27	Garbage destructor	New York	P., S. & B. S.	12-13
*26	Power plant	Washington, D. C	S. & B. S.	11-29
Jan.				
4	Pumping engines	Phila. Pa	S. & B. S.	12-13
5	Blasting	Portsmouth, N. H	S.	12-13
*8	Dredging	New York, N. Y	S. & B. S.	12-20

*Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

Bids close.	Work.	Place.	See issue
Dec. 24	Power-house	Washington, D. C	Dec. 20
Dec. 26	Power plant	Washington, D. C	Nov. 29
	Advertised, Eng. News, Nov. 29 to Dec. 20.		
Dec. 31	Lighting equipment	New York, N. Y	Dec. 20
Jan. 4	Boilers	Clay Center, Kan	Dec. 20
	Advertised, Eng. News, Dec. 20.		
Jan. 5	Subway	West Point, N. Y	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan 3.		
Jan. 10	Electric equipment	Pasadena, Cal	Dec. 6
Jan. 15	Power-house	Nanticoke, Pa	Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.		
Feb. 1	Gas works	Richmond, Va	Dec. 6
	Advertised, Eng. News, Dec. 6.		
Mar. 7	Lighting	Natchez, Miss	Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.		

BRIDGES.

Dec. 20	Girders, etc.	Bridgeport, Conn	Dec. 6
	Advertised, Eng. News, Dec. 6.		
Dec. 20	Steel bridge	Clinton, Mass	Dec. 20
Dec. 20	Bridge	Philippine Islands	Dec. 20
Dec. 29	Bridge	Indianapolis, Ind	Dec. 20
Jan. 2	Drawbridge	Cambridge, Mass	Dec. 20
	Advertised, Eng. News, Dec. 20.		
Dec. 21	Bridges	Chicago, Ill	Dec. 13
Dec. 22	Lamp posts	Washington, D. C	Dec. 13
	Advertised, Eng. News, Dec. 13.		
Dec. 20	Bridge	Charleston, W. Va	Nov. 29
	Advertised, Eng. News, Nov. 29 and Dec. 6.		
Dec. 27	Bridge	Toledo, Ohio	Dec. 13
Dec. 29	Bridge	Greenfield, Ind	Dec. 6
Jan. 3	Plans	Lafayette, La	Dec. 20
Jan. 4	Bridge	Manistee, Mich	Dec. 13
	Advertised, Eng. News, Dec. 13.		
Jan. 7	Bridges	York, Neb	Dec. 20
Jan. 8	Bridge	Hattiesburg, Miss	Dec. 20
Jan. 9	Bridges	Walla Walla, Wash	Dec. 20

BUILDINGS.

Dec. 20	Plans and specifications	Shreveport, La	Oct. 4
Dec. 20	Court-house	West Liberty, Ky	Nov. 22
Dec. 20	Officers' quarters	Fort Robinson, Neb	Dec. 6
Dec. 20	Post-office	Atlantic City, N. J	Dec. 6
Dec. 20	Grandstand	Columbus, Ohio	Dec. 6
Dec. 20	Building	Stamford, Tex	Dec. 13
Dec. 22	Girders	Washington, D. C	Dec. 13
Dec. 24	Jail	York, Pa	Dec. 13
Dec. 27	Heating	Edmonton, Alta	Dec. 20
Dec. 28	Mess hall	Klamath Agency, Ore	Dec. 13
Dec. 29	Shelter	Fort Assinniboine, Mont	Dec. 6
	Advertised, Eng. News, Dec. 6 to 27.		
Dec. 29	School	Covington, La	Dec. 13
Dec. 30	Manufacturing plant	Two Rivers, Wis	Nov. 29
Jan. 2	Post-office	Wausau, Wis	Nov. 29
	Advertised, Eng. News, Nov. 29 and Dec. 6.		
Jan. 4	Coal pockets	Philadelphia, Pa	Dec. 6
	Advertised, Eng. News, Dec. 6 to 27.		
Jan. 4	Light-house	Baltimore, Md	Dec. 6
	Advertised, Eng. News, Dec. 6.		
Jan. 7	Post-office	Newport, R. I	Dec. 6
	Advertised, Eng. News, Dec. 6 and 13.		
Jan. 10	Foundations	Atlanta, Ga	Dec. 13
Jan. 14	Building	Cheyenne, Wyo	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 10.		
Jan. 15	Post-office extension	Dallas, Tex	Dec. 13
	Advertised, Eng. News, Dec. 13 and 20.		
Jan. 16	Mess-hall	Talklai, Ariz	Dec. 20
Feb. 1	Leprosy hospital	Hawaii	Dec. 13
	Advertised, Eng. News, Dec. 13 and 20.		
Feb. 1	Factory	Kokomo, Ind	Dec. 6
Feb. 8	Library	University, N. Dak	Nov. 15
Apr. 15	Plans	Ottawa, Ont	Dec. 20

WATER SUPPLY AND IRRIGATION.

Dec. 20	Sluice gates	Cody, Wyo	Nov. 15
	Advertised, Eng. News, Nov. 1 to 29.		
Dec. 21	Supplies	Minneapolis, Minn	Dec. 13
Dec. 22	Water-works	Bourbonnais, Ill	Dec. 13
	Advertised, Eng. News, Dec. 13 and 20.		
Dec. 22	Water-works	Fort Williams, Ont	Nov. 29
	Advertised, Eng. News, Nov. 29 and Dec. 6.		
Dec. 22	Pumping engines	Chicago, Ill	Nov. 29
	Advertised, Eng. News, Nov. 29 to Dec. 20.		
Dec. 24	Removing engine	Cincinnati, Ohio	Dec. 13
Dec. 26	Supplies	New York, N. Y	Dec. 13
Dec. 26	Steel bars	Portland, Ore	Dec. 13
	Advertised, Eng. News, Dec. 13 and 20.		
Dec. 26	Boilers	New York, N. Y	Dec. 13
Dec. 28	Water-works	Klamath Agency, Ore	Dec. 6
Dec. 28	Water mains	New York, N. Y	Dec. 20
Dec. 28	Pumping engines, etc.	Ada, Ind. T	Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.		
Dec. 29	Pumping plant	Tacoma, Wash	Dec. 20
Dec. 31	Tank	Fortress Monroe, Va	Dec. 6
	Advertised, Eng. News, Dec. 6 to 27.		
Dec. 31	Pipe	Winnipeg, Man	Dec. 6
Dec. 31	Supplies	Calgary, Alta	Dec. 13
Jan. 4	Pumping engines	Philadelphia, Pa	Dec. 6
	Advertised, Eng. News, Dec. 6 to 27.		
Jan. 9	Dam, etc.	Mitchell, Neb	Nov. 22
	Advertised, Eng. News, Nov. 22 to Jan. 3.		
Jan. 7	Water-works	Rolla, Mo	Dec. 20
Jan. 10	Water supply	Elkhart, Ind	Nov. 29
Jan. 15	Water-works	Bisbee, Ariz	Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.		
Jan. 15	Pumps	Meadville, Pa	Dec. 20
Jan. 15	Water-works	Pineville, La	Dec. 20
Jan. 15	Water tunnel, etc.	Gary, Ind	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 3.		
Jan. 22	Reservoir embankment	Granite, Colo	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan 3.		
Jan. 23	Pipe	New Orleans, La	Nov. 15
	Advertised, Eng. News, Nov. 15 to Jan. 17.		
Jan. 23	Pipe, etc.	New Orleans, La	Dec. 13
Jan. 24	Steel bars	Mitchell, Neb	Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.		
Jan. 28	Pumping engines	Muskegon, Mich	Dec. 20
Mar. 1	Pipe and specials	Winnipeg, Man	Dec. 20
	Advertised, Eng. News, Dec. 20 to Feb. 21.		

SEWERAGE.

Dec. 21	Sewer pipe, etc.	Providence, R. I	Dec. 20
Dec. 22	Drains	Deland, Ill	Dec. 20
Dec. 24	Sewers	Indianapolis, Ind	Dec. 20
Dec. 27	Sewers	New York, N. Y	Dec. 13
Jan. 2	Ditch	Rosemond, Ill	Dec. 20
Jan. 7	Sewers	Rolla, Mo	Dec. 6
Jan. 12	Sewers	Merchantville, N. J	Dec. 13
	Advertised, Eng. News, Dec. 13, 27 and Jan. 10.		
Jan. 15	Sewers	Bisbee, Ariz	Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.		
Jan. 15	Disposal plant	Bisbee, Ariz	Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.		
Jan. 21	Sewers	Wichita, Kan	Dec. 13
	Advertised, Eng. News, Dec. 13 to 27.		
Jan. 22	Sewers	Cedar Falls, Iowa	Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.		
Feb. 4	Sewer	Cape Girardeau, Mo	Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.		
Mar. 18	Sewers	Burlington, Iowa	Dec. 20

STREETS AND ROADS.

Dec. 21	Sidewalks, grading	Louisville, Ky	Dec. 20
Dec. 21	Paving	Buffalo, N. Y	Dec. 13
Dec. 24	Paving	New York, N. Y	Dec. 13
Dec. 24	Paving	Cincinnati, Ohio	Dec. 6
Dec. 24	Grading	Madisonville, Ohio	Nov. 15
Dec. 24	Paving	Tulsa, Ind .T	Dec. 20
Dec. 26	Paving	Cincinnati, Ohio	Dec. 6
Dec. 27	Paving	Niagara Falls, N. Y	Dec. 20
Dec. 27	Park	New York, N. Y	Dec. 20
Dec. 29	Resurfacing	Sharpsburg, Md	Dec. 6
Jan. 4	Paving	Cincinnati, Ohio	Dec. 20
Jan. 5	Roads	Terre Haute, Ind	Dec. 20
Jan. 7	Paving	Newburgh, N. Y	Dec. 6
	Advertised, Eng. News, Dec. 6 and 13.		
Jan. 7	Macadam	Amityville, N. Y	Dec. 6
	Advertised, Eng. News, Dec. 6 and 13.		
Jan. 7	Roads	Knox, Ind	Dec. 20
Jan. 8	Roads	Bedford, Ind	Dec. 20
Jan. 8	Roads	Bloomfield, Ind	Dec. 20
Jan. 8	Roads	Columbus, Ind	Dec. 20
Jan. 8	Roads	Versailles, Ind	Dec. 20
Jan. 8	Asphalt plant	Toronto, Ont	Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.		
Jan. 9	Roads	Bloomington, Ind	Dec. 20
Jan. 9	Roads	Rockville, Ind	Dec. 20
Jan. 10	Paving	Norfolk, Va	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan 3.		
Jan. 10	Macadam	Norfolk, Va	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 3.		

MISCELLANEOUS CONTRACTS.

Dec. 20	Pier	St. Valier, Que	Dec. 13
Dec. 20	Canal	Pittsfield, Ill	Dec. 13
Dec. 20	Sluice gates	Wyoming	Nov. 1
	Advertised, Eng. News, Nov. 1 to 29.		
Dec. 20	Barges	Vicksburg, Miss	Nov. 22
	Advertised, Eng. News, Nov. 22 to Dec. 13.		
Dec. 21	Rock removal	New York, N. Y	Nov. 22
	Advertised, Eng. News, Nov. 22 to Dec. 13.		
Dec. 22	Steel derrick	Philippine Islands	Nov. 22
	Advertised, Eng. News, Nov. 22 and 29.		
Dec. 22	Cranes	Portsmouth, N. H	Nov. 29
Dec. 22	Change of line	Huntingdon & Broad Top Mt. Ry	Dec. 6
	Advertised, Eng. News, Dec. 6.		
Dec. 22	Drainage	De Land, Ill	Dec. 6
	Advertised, Eng. News, Dec. 6.		
Dec. 22	Iron beams	Sweden (Foreign)	Dec. 20
Dec. 26	Steel bars	Portland, Ore	Dec. 13
Dec. 26	Cement, steel, etc.	New York, N. Y	Dec. 13
Dec. 26	Electric conductors	New York, N. Y	Dec. 13
Dec. 27	Armory equipment	New York, N. Y	Dec. 13
Dec. 27	Destructor plans	New York, N. Y	Nov. 29
Dec. 27	Fire alarms	New York, N. Y	Dec. 20
Dec. 27	Fire hose	New York, N. Y	Dec. 20
Dec. 27	Tunnel entrance	Boston, Mass	Dec. 20
	Advertised, Eng. News, Dec. 20.		
Dec. 28	Sea wall, etc.	New York, N. Y	Dec. 20
Dec. 28	Dredging	New York, N. Y	Nov. 29
	Advertised, Eng. News, Dec. 6 to 27.		
Dec. 28	Clam-shell dredge	Wilmington, Del	Dec. 6
	Advertised, Eng. News, Dec. 6 to 20.		
Dec. 28	Engineering supplies	Panama	Dec. 13
Dec. 28	Ditch	Des Moines, Iowa	Dec. 13
Dec. 31	Canal supplies	St. Catharines, Ont	Dec. 20
Jan. 2	Wharf repairs	Ft. Slocum, N. Y	Dec. 20
Jan. 2	Wire, etc.	Sweden (Foreign)	Dec. 20
Jan. 5	Blasting	Portsmouth, N. H	Dec. 13
Jan. 7	Pier	Nicolet, Que	Dec. 20
Jan. 8	Naval supplies	Washington, D. C	Dec. 20
Jan. 8	Dredging	New York, N. Y	Dec. 6
	Advertised, Eng. News, Dec. 6 to 27.		
Jan. 9	Monument	Mt. Vernon, Ind	Nov. 22
Jan. 9	Telephone supplies	Australia (Foreign)	Dec. 20
Jan. 10	Street railway franchise	Salem, Mass	Dec. 13
Jan. 12	Canal	Panama	Dec. 20
Jan. 14	Telephone supplies	Australia (Foreign)	Dec. 20
Jan. 15	Crane runways	Callejo, Cal	Dec. 13
Jan. 17	Wharf	Key West, Fla	Dec. 6
	Advertised, Eng. News, Des. 6 to Jan. 3.		
Jan. 21	Dump scows	Cleveland, Ohio	Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 10.		
Jan. 29	Piers	North Chicago, Ill	Dec. 13
Feb. 11	Railway	Spain (Foreign)	Dec. 6
Mar. 18	Tunnel	New Zealand (Foreign)	Sept. 13
	Advertised, Eng. News, Sept. 13 to Mar. 14.		
Apr. 12 ('07)	Ditches	Brookings, S. Dak	Oct. 18

CIVIL SERVICE EXAMINATIONS.

Dec. 27	Surveyor	Philippines	Dec. 6
Jan. 3	Aids, etc.	Washington, D. C	Dec. 13
Jan. 3	Civil Engr.	Philippines	Dec. 13
Jan. 8	Bacteriologist	New York, N. Y	Dec. 20
Jan. 9	Topographic & Cartographic Draftsmen	Washington, D. C	Dec. 13
Jan. 9-10	Computer, Draftsman	Wash., D. C	Dec. 16
Jan. 9	Arch. Draftsman	San Francisco, Cal	Dec. 20
Jan. 10	Inspector of Filters	New York, N. Y	Dec. 20

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

CANADA.—Hood Bros., Spokane, Wash., who own $175,000 of timber limits near Crazy Creek, B. C., will construct a branch line from the main line of the Canadian Pacific Ry. to their holdings, a distance of three miles.

The Canadian Pacific is applying for an extension of its bonding powers on the Toronto-Sudbury branch to $40,000 a mile.

The Edmonton, Dungevan & British Columbia Ry. Co. is applying for incorporation to build from Edmonton by the Peace and Parsnip River Valleys to Fort George, B. C.

The Athabasca Ry. Co. asks that its powers be extended to enable it to build from Fort McMurray, on the Athabasca and Clearwater Rivers, north to Fort Smith, on Slave River.

A company which gives no name is asking incorporation with right to build a railway from the northern boundary of British Columbia to Dawson City.

CANADIAN PACIFIC.—R. Marpole, Gen. Supt., Vancouver, B. C., advises us that no contract will be let for work of improving the Esquimalt & Nanaimo branch, as noted in Engineering News, Nov. 8. The work, which will amount to about $132,000, will be done by the company.

CAROLINA, GLEN-ANNA & PEE DEE.—L. V. Edwards, Ch. Engr., High Point, N. C., writes us that surveys for 50 miles of this line have been made, and right-of-way for 25 miles has been obtained. The construction consists of heavy work, 21 miles of reconstruction and 90 miles of new work. The capital has been secured. Dee Allen is Pres., High Point. Noted on Nov. 15.

CHARLESTON & WESTERN CAROLINA.—It is reported that the Charleston & Western Carolina Ry. Co. is contemplating building a 10-mile branch from Sheldon, N. C., to the phosphate mines of the Virginia-Carolina Chemical Co., on Bull River. E. B. Pleasants is Ch. Engr., at Wilmington, N. C.

COVINGTON & SOUTHWESTERN.—William G. Ruhl, Pres., Covington, writes us that surveys have been made and right-of-way secured for this line, which will run from Covington, Ind., to coal fields at Winkler, Northern Park County, Ind., a distance of 22½ miles. Contracts will be let probably in January for ties, steel, trestles, culverts, etc., for the first eight miles, from Covington to Coal Creek. Contracts for balance of line will be let early in the spring. C. Walter Leinbach, Covington, is Ch. Engr.

DENVER, NORTHWESTERN & PACIFIC.—H. A. Sumner, Ch. Engr., Denver, advises us that this railway, when completed, will extend from Denver, Colo., to Salt Lake City, Utah, a distance of 570 miles. Surveys have been run. Right-of-way is secured for over 250 miles. Line will be built three-quarters of the distance through river valley country, crossing the Continental Divide and the Wahsatch Range. Trains are now operated over 126 miles; 88 miles are now under contract to ORMAN & CROOK, of Pueblo, Colo., and DUNPHY & NELSON, of Cripple Creek, Colo. Company proposes to let contracts next year for 100 additional miles of line. D. H. Moffat, Pres., is reported as saying that the road will be built to Salt Lake City by Jan. 1, 1908. By April 1 next it will be completed to Steamboat Springs, and from that point westward the work of construction will not be difficult. The distance from Steamboat Springs to Salt Lake is about 300 miles.

FALMOUTH RY.—We are advised by A. M. Yonge, Ch. Engr., Richmond, Va., that surveys have been made and right-of-way practically all secured for this line, which will run granite quarries on the Rappahannock River to a point on the Richmond, Fredericksburg & Potomac R. R. The line will be four miles long and construction will be principally cutting and filling. It has not yet been decided when contracts will be let. W. E. Grant, Richmond, is Pres.

GULF, COLORADO & SANTA FE.—Company has given notice that it will apply to the Texas Legislature for authority to consolidate into one system the Gulf, Colorado & Santa Fe, the Texas & Gulf, the Gulf & Interstate, the Gulf, Beaumont & Kansas City and the Gulf, Beaumont & Great Northern, and for authority to build extension from Center to Timpson, Tex., 15 miles, and from Longview to a point on the Red River, a distance of 125 miles. Eventually the latter line is to be extended northwest through the Indian Territory to a connection with the Kansas City line of the Santa Fe, an additional distance of 150 miles.

INTERCOLONIAL.—We have been advised by William B. MacKenzie, Ch. Engr., Moncton, N. B., that the Intercolonial, from St. John to Hampton, 22½ miles, and from Moncton to Painsec, 7½ miles, will be double-tracked. Contracts will be let as soon as the Dominion Parliament votes money for expenses.

MADISON SOUTHERN.—It is reported that this company has been chartered with $50,000 capital. John W. West is Pres. and W. P. Smith is Secy. and Treas. Office at Jacksonville, Fla.

MISSISSIPPI.—W. Denny & Co., Moss Point, Miss., have advised us that surveys have been finished and right-of-way and capital secured for their proposed line of 35 miles from Moss Point to Donovan, Miss. About 17 miles of the line is in operation. The road will be completed without letting contracts. A. S. Denny is Pres.; O. H. Brown is Ch. Engr., both at Moss Point.

NEW ORLEANS GREAT NORTHERN.—J. F. Coleman, Ch. Engr., New Orleans, La., states that surveys are being made for a line from Slidell, La., northwest along the shore of Lake Ponchartrain to Mandeville and thence to Abita Springs and Covington, but that nothing further has been done toward construction.

NEW ORLEANS GREAT NORTHERN.—C. D. SMITH & CO., of Memphis, Tenn., it is reported, have been awarded a contract for building an extension of the New Orleans Great Northern R. R., from Jackson up the Pearl River Valley to Edinburg, Miss., about 65 or 70 miles. This firm has the contract for the extension from Smith's Ferry to Jackson, and it has given a subcontract there to A. G. BROWN. The work on the extension to Edinburg, it is said, will begin the first part of January and subcontracts are now being allotted.

NEW ORLEANS, NATCHEZ & PACIFIC.—Thomas Reber, Gen. Mgr., of New Orleans, La., has made the following announcement, according to the New Orleans "Picayune": "I can say that everything in regard to the road is in fine shape," said Judge Reber. "We have practically completed our financial arrangements, and within a short time I expect to have the men who are going to put up the money make a trip over the proposed route. We have reason to believe that the first issue of bonds will be taken by English capitalists. The preliminary survey of the line which was made some time ago by Krumbhaar & Aiken, New Orleans, Engrs., has proved very satisfactory and within three weeks we hope to start work. The road will be completed, if our plans carry, within two years." A. B. Wheeler, of New Orleans, is Pres.

NORFOLK & SOUTHERN.—Marsden J. Perry, Chn. Bd. of this company, is reported as saying that it is planned to expend from $15,000,000 to $20,000,000 to improve the various lines recently merged in this company. F. L. Nicholson is Engr. M. W., at Norfolk, Va.

OKLAHOMA & CANADIAN RIVER.—Company has been chartered in Oklahoma, with a capital of $7,350,000. The charter calls for a right-of-way from El Reno, in Canadian County, running northeast into and through Canadian, Kingfisher, Blaine, Dewey and Woodward counties and through the county of Clark, in Kansas, to Mead, Kan. The length of the road is 245 miles. The principal business offices are to be located at El Reno. The incorporators of the company are: E. O. Blocke, E. E. Blocke, and H. B. Low, of El Reno, and M. A. Low and Paul E. Walker, of Topeka, Kan.

OREGON & WASHINGTON.—We are advised by E. C. Hawkins, Ch. Engr., Burke Bldg., Seattle, Wash., that the proposed railway line will be about 180 miles long, extending from Portland, Ore., to Seattle. William Crooks, at Portland, is Pres. Surveys have been made and capital secured. Right-of-way has been obtained. There will be considerable heavy earth work and bridges. Contracts for construction probably will be let in January, 1907.

TEXAS NORTHERN.—P. B. McDonald, Pres., is reported as saying that the company is now ready to let contracts for the first four miles of its line out of Dallas toward Egan, Tex.

TEXAS.—Regarding the item in the issue of Nov. 8 that C. W. Post, of Battle Creek, Mich., who owns a large body of land in Garza County, contemplates constructing a line of railroad from his land to Sweet Water, Tex. Mr. Post states that he is having some work done toward the construction of a line, but he has not completed any arrangements to build it. There are four different railway lines projected through his tract in Texas.

Citizens of Fredericksburg, Tex., are offering a bonus, of which it is said $35,000 is in cash, for the construction of a railway from Waring, on the San Antonio & Aransas Pass Railroad, to Fredericksburg, on which route 17 miles of grade have been built, leaving only eight miles to complete the line. Temple D. Smith, of Fredericksburg and others are interested.

WASHINGTON, PATUXENT RIVER & DRUM POINT.—Wells & Wells, Counsel, Commercial National Bank Bldg., Washington, D. C., state that this company purposes to build a railroad from Pindell, on the Chesapeake Beach Railroad to Drum Point, Md., a distance of 36 miles, and that surveys are now being made. The route is via Prince Fredericktown, Dunkirk and Solomon's Island. The officers of the company have not yet been chosen. We are advised that contracts for construction of this line will be let in the early spring. Wells & Wells, Hyattsville, Md., are Attorneys. Noted in issue of Nov. 22.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

WALES, MASS.—It is reported that the franchise of the Hartford & Worcester St. Ry. Co. in Wales has been extended for one year by the Selectmen. In asking for the extension the company stated that work on the line through Wales would begin in the spring. It is now expected that the line under construction from Rockville to Stafford Springs will be extended through Wales to some point on the new line from Palmer to Fiskdale now nearly completed. By this plan the manufacturing plants in Wales and the villages in Stafford will be given direct freight service.

WESTERLY, R. I.—According to press reports, the Norwich & Westerly Ry. Co. has secured a right-of-way for construction of the line to Pleasant View, which the company has contemplated building, and work will be begun as soon as the details have been completed on the line between Westerly and Norwich. The line has been surveyed as far as the breach at Weekapaug. The Norwich-Westerly Construction Co. intends to build up a summer resort of its own between Pleasant View and Weekapaug. The company has an option on nearly all of the land facing the beach from Pleasant View to Weekapaug.

NEW HAVEN, CONN.—The Consolidated Railway Company has made application to the City Council for permission to electrify the old Shore Line cut in Fair Haven. C. S. Mellen is Pres.; M. T. Rider is Ch. Engr., both at New Haven.

SEYMOUR, CONN.—The Woodbury & Seymour Street Railway Co. is about to make application to the Supreme Court to have its corporate name changed to Waterbury & Pomperaug Valley Railroad Co.

DUNKIRK, N. Y.—The Dunkirk St. Ry. Co. has received its certificate of necessity from the State Board of Railroad Commissioners and will build a belt line in Dunkirk before July 1, 1907. It is a portion of the proposed Buffalo-Erie trolley line. The same company recently bought the Dunkirk & Fredonia R. R., and is now reconstructing it and laying two tracks. J. C. Calisch is Pres., Buffalo, N. Y.

NIAGARA FALLS, N. Y.—We are informed by Edward H. Perry, Supt. of the Inclined Railway at the N. Y. State Reservation, Niagara Falls, that nothing will be done towards constructing new station and improving the line until the State Legislature has granted funds for which it will be asked.

HUNTINGTON (L. I.), N. Y.—J. R. Savage, Ch. Engr. of the Long Island R. R. Co., Jamaica, N. Y., informs us that contracts will not be let before next spring for constructing the Huntington R. R. This announcement is made in regard to the item in issue of Nov. 1, which stated that the Huntington Highway Commissioners have granted a franchise for a cross-island electric railway to the Huntington Railroad Co. The franchise, as accepted, is believed to be a very good one for both the company and the town. "Actual construction is to be commenced before April 1, 1907, and at least $10,000 must be expended in labor, materials, rails, ties, etc., actually affixed to the soil before Oct. 1, 1907, and the railroad in operation before Oct. 1, 1908, but if $75,000 shall have been expended prior to Oct. 1, 1908, and the road not completed, the company is given another year: It must be completed, however, within the extended time or the franchise will be void."

ALTOONA, PA.—The survey of the proposed Altoona, Hollidaysburg & Bedford Springs Electric Ry. is reported to have been completed to Newry. The line will enter Altoona over the Logan Valley line, connecting at Broad Ave. and 32d St.

BROWNSVILLE, PA.—In order to reach Brownsville the West Pennsylvania Railways Co. will build from Footedale, a distance of about 9½ miles. The contract for the work in Brownsville Borough has been let to JOHN DUGGAN, of New Haven, who has the equipment on the ground. The contract will soon be let to build the portion of the line from Footedale to Orient, about three miles. In the early spring the line will be extended from Orient on to Brownsville, going via the Republic works and near Merrittstown. The line from Leckrone to Masontown will be completed and in operation by Feb. 1. The contract was awarded to the BESSEMER CONTRACTING & BALLAST CO., but the company has gone into the hands of a receiver, F. H. Gleason, of McKeesport, and he is finishing the work under the supervision of Mr. Sheldon.

BALTIMORE, MD.—It is reported that plans are being made by the United Railways & Electric Co. for several new suburban lines next summer. In addition to the new line to Roland Park, surveys have been made for four more. The new work will be done by the Maryland Electric Railways Co., which was organized for the purpose of providing car houses and feeders to be leased to the United. The new lines planned are: St. Paul St. and Waverly Ave., out the new St. Paul St.-Merryman's Lane Boulevard to Roland Park; from Orangeville to Highlandtown, on Eighth St.; from Towson to Timonium, ou the York Road; from Lakeside to Cockeysville, over private right-of-way, and connect at Timonium with the line from Towson; from the terminus of the present Wilkens Ave. line to Halethorpe and Elkridge. The franchise for the latter line is owned by the Baltimore, Halethorpe & Elkridge Electric Railway Co. Work on the new boulevard line has already been started. Work on the line from Towson to Timonium will probably begin in a short time. This line will be about two miles long and will be an extension of the present road to Towson. It is proposed to connect with the line to be built from Lakeside to Cockeysville. Surveys for the latter have been in progress for some time past. The United now operates a line from Roland Park to Lakeside.. The new line from Orangeville to Highlandtown, on Eighth St. will give this section a north and south road, and will connect with the lines running through Highlandtown to the excursion resorts. Of the new suburban lines the one from Lakeside to Cockeysville is about seven miles long. If all these lines are built and are double-tracked, as now proposed, it will mean that 32 miles of track will be added to the United's system, which on Jan. 1 had a total of 386 miles. William A. House is Gen. Mgr., Continental Trust Bldg., Baltimore.

GRAFTON, W. VA.—We are officially advised that contracts for constructing 2½-mile extension of the Grafton Electric Ry. will be let about March 1, 1907.

COLUMBIA, S. C.—Bruce W. Ravenel, Secy. of the Suburban Transit Co., advises us that right-of-way has been secured for his road, which will connect Columbia and Colonial Heights, a suburb of Columbia. The line will be about 1½ miles in length. The company will let contracts, if possible, within 60 days. Julius H. Walker, Columbia, is Pres.

LIMA, OHIO.—We are advised by Joseph A. Vandegrift that contracts for constructing the line of the Lima, Kenton & Marion Traction Co., running from Lima to Kenton, LaRue and Marion, will be let in January, 1907. The work consists of light grading, ballasting, track-laying, masonry and bridge building. Surveys have been made, right-of-way obtained and capital secured. The line will connect at La R[illegible] with the Columbus, Magnetic Springs [illegible] Northern Ry., now under construction, [illegible]een Delaware and La Rue, 30 miles. Th[illegible] operation as far as Magnetic [illegible]ter line is in [illegible] Springs, twelve miles, and is graded six [illegible] farther to Richmond. Tracks are bei[illegible] laid on this section. This line is contr[illegible] by the L., K. & M. Traction Co. Note[illegible] Dec. 6.

DILLONVALE, OHIO.—We [illegible] officially informed that contracts will b[illegible] warded early next spring for building th[illegible] Dillonvale & Ohio River Traction Co.'s lin[illegible] Surveys are completed. The work of secu[illegible] the right-of-way is progressing rapidly. [illegible] that those interested expect to have every[illegible] in readiness to start construction wo[illegible] as soon as the weather opens in the spr[illegible] The road will be built entirely on pr[illegible] right-of-way outside of corporation li[illegible] and outside of those limits will have [illegible] grade over 2%, and with a maxmium cur[illegible]ure of 9°, with the exception of one 13[illegible]arve. The D. & O. R. Traction line will [illegible] 6½ miles long, from Rayland to Dillonva[illegible] Ohio, and will form a portion of a line [illegible] be built from Uhrichsville, Ohio, on the [illegible]n Handle Traction Co., via Cadiz, Adena [illegible]d Dillonvale, to Rayland, Ohio, on the [illegible]io River, where connections will be made [illegible]th Steubenville, Ohio, and Wheeling, [illegible] Va., by means of the line now being [illegible]nstructed from Wheeling to Steubenvil[illegible] by the Wheeling Traction Co. The sur[illegible] for the line from Dillonvale to Uhrichsv[illegible] will be started at once. T. J. Stringer, [illegible] Rayland, is promoting the road, and W. [illegible] Fawcett, of Wheeling, is the Ch. Engr. T[illegible] surveys are being made by the Central [illegible]ngineering Co., Rose Bldg., Cleveland, Ohio. [illegible] capital is assured. Work will average a[illegible]out 15,000 cu. yds. a mile, mostly shale.

LAFAYETTE, IND.—D. E. Harrington, Otterbein, Ind., writes us that surveys have been made for the line of the Lafayette & Hoopeston Interurban Co., which will connect Lafayette with Hoopeston. The line will be 40 miles long and will be constructed on level ground. Right-of-way and capital have been partly secured. I. E. Switzer, Otterbein, is Pres.; John W. Farrell is Ch. Engr., Lafayette.

GENESEO, ILL.—Hugh W. Cole, Secy. and Gen. Mgr., Box 637, Geneseo, writes us that surveys have been completed and right-of-way secured for the line of the Rock River Traction Co. The road will be 124 miles long and will be built as follows: Geneseo to Rock Island; Geneseo to Sterling; Geneseo to Princeton and Kewanee, and Prophetstown to Morrison. A bond issue of $2,000,000 was authorized on Dec 10. The section from Geneseo to Rock Island will be constructed early in the spring. Contracts have not yet been let.

DALLAS, TEX.—F. A. Jones, Ch. Engr. Texas Traction Co., Scollard Bldg., Dallas, advises us that the company will construct a line from Dallas, 62 miles, to Sherman, via McKinney. Surveys have been made and right-of-way and capital, $3,000,000, secured. The general contract has been let to SUDERMAN & DOLSEN, Galveston, Tex.

HOUSTON, TEX.—The Houston Electric Co., which is owned by Stone & Webster, of Boston, Mass., is planning extensive improvements to its system in this city. The company will expend about $200,000 for improvements of track. The lines will be relaid with heavier rails, which will range from 60 lbs. to 90 lbs. New equipment will be installed in the power-house, which will increase the capacity of the plant by 1,200 HP. M. M. Phinney, Dallas, Tex., is Mgr.; D. P. Robinson, 89 State St., Boston, is Engr.

BELLINGHAM, WASH.—It is reported, from Seattle, Wash., that "Stone & Webster, 84 State St., Boston, owners of the Seattle Electric Co.'s system, plan to build interurban electric lines connecting the town of Snohomish, Skagit and Whatcom counties to the north of King, during 1907, at a total cost of $2,000,000. The lines will radiate from Bellingham. In Whatcom and Skagit Counties the company will build 43 miles of line, 33 miles of which will be in Skagit County, and 11 miles in Whatcom County. Surveys are to be started at once, and by Jan. 1, 1908, or before, cars will be operating between Bellingham, Mount Vernon, La Conner, Burlington, Sedro-Woolley and other points."

SAN DIEGO, CAL.—It is reported that work on double tracking the first trolley line of the San Diego Electric Ry. Co. will begin in a short time. It is planned to carry the double track to 16th St., from Sixth St. E. Bartlett Webster, Bellingham, Wash., is Pres. and Gen. Mgr.; M. L. Wyneken, San Diego, is Ch. Engr.

OAKLAND, CAL.—The City Council has granted the Oakland Traction Consolidated a franchise to run a line on Claremont Ave. The railroad company agrees to furnish electric lights and to have a station somewhere on Claremont Ave., between College and Telegraph Aves. W. F. Kelley, Oakland, is Gen. Mgr.; Eward M. Boggs is Civil Engr.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

ELLSWORTH, ME.—The Bar Harbor and Union River Power Co. will begin work at once upon development of the power of Union River at Ellsworth, Me. The plans contemplate a concrete dam over 60 ft. high, with power-house containing modern hydraulic and electrical equipment. J. A. Leonard, Ellsworth, Me., is Engr. of this county and Sellers and Rippey, Philadelphia, are Consult. Engrs. We have been advised that the mention of George F. West, Portland, Me., as Treas., which was made in Engineering News Dec. 13, was incorrect.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Dec. 31, by John H. O'Brien, Comr. Dept. of Water Supply, Gas & Electricity, for furnishing gas lamps, &c., on the streets, and so on, and for connecting, lighting, ex-

tinguishing, cleaning, repairing and maintaining the same, and also lamps belonging to the city, supplying new lamps when required, and for furnishing burners and appliances for improved system of lighting on the streets, avenues, parks and public places, from January 1, 1907, to December 31, 1907, both inclusive; and for furnishing naphtha or similar illuminating material for the public lamps, extinguishing same, and for furnishing, lighting, extinguishing, cleaning, repairing and maintaining such lamps, supplying naphtha, etc., or new lamps, for furnishing new lamps as required, for furnishing or making certain repairs to lamp-posts, and for furnishing burners and appliances of improved system of lighting streets, avenues, parks and public places, from January 1, 1907 to December 31, 1907, both inclusive. Also for furnishing, operating and maintaining electric lamps for lighting streets, avenues, public buildings, parks and public places, from January 1, 1907, to December 31, 1907, both inclusive; and for furnishing gas for and to the public lamps on the streets, supplying gas, etc., for new lamps when required, for making certain repairs to lamp-posts and for furnishing gas to public buildings, from January 1, 1907, to December 31, 1907, both inclusive; and for furnishing, putting in place and maintaining five hundred (500) gas regulators, from January 1, 1907, to December 31, 1907, both inclusive; and for furnishing steam for heating or power purposes to certain public buildings, from January 1, 1907, to December 31, 1907, both inclusive.

WEST POINT, N. Y.—Bids are asked until noon, Jan. 5, 1907, by the Quartermaster for the construction of an electric subway at West Point. (Advertised, Engineering News.)

NANTICOKE, PA.—Bids are asked until Jan. 15, 1907, by the American Pipe Co., 112 North Broad St., Philadelphia, Pa., for the construction of a power-house, head and tail race. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids are asked until Dec. 24 at the University Hospital for a 3-story power-house and nurses' home to be erected at the hospital. Sunderland Bros., 403 Ouray Bldg., are Archs.

BLACKSBURG, S. C.—The WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg, Pa., has been awarded the contract for twelve 5,000-HP. generators, with transformers, switchboards and exciters, by the Southern Power Co., of Charlotte, N. C. It is reported that this contract amounts to $400,000. The Southern Power Co. has purchased this equipment for the two power plants to be erected at Ninety-nine Islands, on the Broad River near here, and at Rocky Creek near Great Falls, on the Catawba River. W. S. Lee, Jr., is Ch. Engr. at Charlotte.

COLUMBUS, GA.—Boston capitalists have undertaken the harnessing of the falls of the Chattahoochee River, between Columbus and West Point. This project of developing over 200,000 HP., involving an outlay of $1,000,000, is now being pushed forward by the Columbus Power Co., a combination of all the power companies along the river for twenty miles above this city.

PELHAM, GA.—The town of Pelham will install an electric light plant, next year, in connection with a water-works system. Estimated cost, $40,000.

NATCHEZ, MISS.—Bids are asked until 4 p. m., March 7, 1907, by the Light and Water Committee for lighting the City of Natchez for a period of ten years from March 7, 1908. S. B. Stewart is Chn. Lights & Water Com. (Advertised, Engineering News.)

BATON ROUGE, LA.—Joseph Gottlieb, Pres. of the Louisiana State Bank, has obtained an option on the entire plant of the Baton Rouge Electric Light & Power Co., including the street railway, for Eastern capitalists.

CHATTANOOGA, TENN. — Chattanooga-Tennessee River Power Co. has contracted for the hydraulic equipment for the new lock and dam power plant under course of construction at Hale's bar. J. C. Guild, of Chattanooga, is Ch. Engr., and John Bogart, 16 Exchange Bldg., New York, Consult. Engr.

LA GRANGE, KY.—It is reported that an electric light plant is to be erected here at a cost of $10,000 to furnish the town and business houses with light. Chas. Sauer is Pres. Commercial Club.

CLEVELAND, OHIO.—It is reported that the Cleveland & Southwestern Traction Co. propose to erect a power-house large enough to generate power to supply various roads here. C. N. Wilcoxon is Gen. Supt. at Kammis, Ohio.

CLAY CENTER, KAN.—Bids are asked by the City of Clay Center until Jan. 4, 1907, for boilers, engines and electrical machinery. Geo. W. Hanna is Mayor. (Advertised, Engineering News.)

PIERRE, S. DAK.—The City Council has awarded to the WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg, Pa., the contract to install an electric light plant here.

RAPID CITY, S. DAK.—The Rapid River Light, Power & Transit Co. will erect a power plant on Rapid Creek at a cost of $250,000. The plant will generate 3,000 HP. which will supply various manufacturing concerns in this city. The construction work is to be let by contract. F. M. Lockhart, of this city, is interested.

CHEYENNE, WYO.—See under Buildings.

ADA, ARK.—It is reported that the city will issue $40,000 of bonds in order to erect a water-works and electric light plant.

BROWNSVILLE, TEX.—The city will erect a water-works and an electric light plant here at a cost of $75,000. F. Champion is City Secy., and W. M. Ratcliffe, of Brownsville, is Engr.

PALESTINE, TEX.—The Palestine Electric Light Co. has awarded the contract for turbo generators and other electrical equipment for the proposed electric light plant to the WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., for $28,000; for boilers, concrete stack and steam main to E. CONNELLY, of Houston, for the STERLING BOILER CO., for $10,500. Jas. F. Brook is Consult. Engr., at Palestine.

HOUSTON, TEX.—The Houston Light & Power Co. will put in an underground system here at an estimated cost of $300,000. W. H. Chapman is Mgr., at Houston.

ARTESIA, N. MEX.—It is reported that R. M. Ross, Cashier of the First National Bank, is at the head of the proposed power plant to be erected on the Penasco River, near here, by the business men of this city. The power is to be used in operating pumping stations, factories and lighting plant. Estimated cost, $250,000.

PRINEVILLE, ORE.—The Pringle Falls Electric Power & Water Co. has been incorporated witha capital of $1,000,000, by O. M. Pringle, J. W. Collins, W. H. Huston and L. B. La Follett. It is proposed to generate the power for the plant at Pringle Falls.

PORTERVILLE, CAL.—The Porterville Gas & Electric Co. will erect a plant here at a cost of $50,000. J. R. Thompson, Bullard Block, Los Angeles, is Engr. A. Genslein, 501 Chamber of Commerce Bldg., Los Angeles, is Mgr.

GLENBORO, MAN.—The Council is considering a proposition for the erection of an electric light plant here.

EDMONTON, ALTA.—The city engineer has prepared plans for the doubling of the capacity of the electric lighting plant. J. G. Kinnaird, Secy.-Treas.

FERNIE, B. C.—A. Aberli, Hydraulic Engr. of the Allis-Chalmers Co., Montreal, and J. O. Gallice, Electrical Engr. of the same company, have been engaged by the Crows Nest Pass Coal Co. to prepare plans for an immense power plant.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

LACONIA, N. H.—The City Council has appropriated money for repairs to the existing wooden bridge, and the proposed steel or concrete bridge has been abandoned for the present. Chas. A. Funch is City Engr.

CAMBRIDGE, MASS.—Bids are asked until noon, Jan. 2, by L. M. Hastings, City Engr., City Hall, Cambridge, for constructing a complete steel highway draw-bridge across Lechmere Canal in the line of Commercial Ave., Cambridge. (Advertised, Engineering News.)

FALL RIVER, MASS.—The contract for the erection of the steel and concrete bridge over Taunton River, from Fall River to Somerset, has been awarded to HALBROOK, CABOT & ROLLINS, 6 Beacon St., Boston. Richard M. Berrian is Engr., 53 State St., Boston; James F. Jackson is Chn., State House, Boston.

CLINTON, MASS.—Bids are asked until 1 p. m., Dec. 20, by the Road Commissioners of the Town of Clinton for erecting and furnishing a 2-span steel bridge over the tracks of the Boston & Maine R. R. H. W. Welch is Chn. and P. O. Dupont is Secy.

NEW YORK, N. Y.—Bids were opened Dec. 13 by J. W. Stevenson, Bridge Comr., for constructing foundations, abutment core and metal work of the steel viaduct of the Queens approach of the Blackwell's Island bridge over the East River. The following bids were received: Buckley Realty Construction Co., Times Bldg., $797,804; Snare & Triest Co., 143 Liberty St., $885,830; American Bridge Co., 42 Broadway, $918,098; Terry-Tench Company, $919,500; Carbon Steel Co., 26 Cortlandt St., $945,319; Williams Engineering & Contracting Co., 21 Park Row, $1,035,592; Kings Bridge Co., 277 Broadway, $1,157,443.

CHESTER, PA.—It is reported that the Chester & Delaware River R. R. Co. has awarded the contract for constructing a steel draw bridge over Chester Creek, at Chester, to the AMERICAN BRIDGE CO., Frick Bldg., Pittsburg, for about $18,000.

NORFOLK, VA.—Plans have been prepared by W. F. Brooke, City Engr., for two viaduct bridges crossing Newton's Creek—one 60 ft. wide on the main thoroughfare, and a smaller one for the branch roadway.

FAIRMONT, W. VA.—It is reported that the Fairmont & Clarksburg Traction Co. will erect a bridge over the Monongahela River here. A. T. Watson is Pur. Agt. at Baltimore, Md.

DARIEN, GA.—It is reported that the Georgia Coast & Piedmont R. R. Co. will erect a double-draw steel bridge over the Altamaha River here at a cost of $100,000. L. K. Emerson is Supt. at Darien.

HATTIESBURG, MISS.—Bids are asked until Jan. 8, 1907, by the Board of Supervisors of Perry County, Miss., for the erection of a steel bridge over Big Black Creek, near Janice, Miss. T. E. Batson is Clk.

LA FAYETTE, LA.—Plans are asked until Jan. 3, by Felix H. Monton, for an iron draw-bridge with 16-ft. roadway, to be built over Bayou Vermillion at or near Darinns Broussard Crossing.

CENTERPOINT, IND.—The VINCENNES BRIDGE CO., Vincennes, Ind., has been awarded the contract for erecting a new steel bridge over Eel River near here. Contract price is $12,000.

INDIANAPOLIS, IND.—Bids are asked until 10 a. m., Dec. 29, by the Commissioners of Marion County, for the erection of a bridge over White River at 30th St. C. J. Clark is County Audr.

NEWPORT, IND.—The following bids for the erection of the substructure of a 4-span bridge to be erected near here have been received by H. T. Payne, Audr.: Midland Bridge Co., Kansas City, Mo., $34,482; the Lafayette Engineering Co., Lafayette, Ind., $29,000; James F. Rice, Delphi, Ind., $22,518. Carl H. Conley is Design. Engr.

MELODY, ILL. — The RUDOLPH S. BLOME CO., Unity Bldg., Chicago, has been awarded the contract, at $16,000, for the reinforced concrete culvert and reinforced concrete bridge at the country home of J. O. Armour. Robt. C. Clark is Ch. of Construction.

PEORIA, ILL.—The Bridge Committee from the Board of Supervisors and the Highway Commissioners from Timber Township has awarded the contract for a bridge over the George W. Keel Creek on the road from Glasford to Trivoli to the MISSOURI BRIDGE CO.

SIOUX CITY, IOWA.—The Chicago, Burlington & Quincy R. R. Co. will erect a draw bridge over the Missouri River here, just below the Omaha bridge. To build a low bridge at the point selected by the Burlington, it will be necessary to make a deep cut through the hills north of the Omaha bridge and east of the present tracks of the Sioux City Traction Co. Lines for the approach and tracks north of the bridge to Division street are being marked by engineers and surveyors.

YORK, NEB.—Bids are asked by W. A. Miller, County Clk., until noon, Jan. 7, 1907, for the construction of wooden or steel bridges that may be erected in York County during the year 1907.

DEXTER, N. MEX.—The contract for the erection of a 2-span steel and concrete bridge has been awarded to the MIDLAND BRIDGE CO., of Kansas City, Mo., for $14,400. It will have 155 and 30-ft approaches, 16 ft. wide and will have a capacity of 1,280 lbs. to the lineal ft.

WALLA WALLA, WASH.—Bids are asked by the County Commissioners, until 1 p. m., Jan. 9, 1907, for the erection of a steel and wooden bridge over the Touchet River on the Johnson Bros.' farm.

ST. JOHNS, ORE.—Plans have been prepared for a high bridge at St. Johns across the Willamette River. It is to clear all river traffic and to have approaches on an easy grade that will permit the heaviest class of teaming. The bridge will extend from Hayes St., in St. Johns, to a point just north of the Linnoon roadhouse. On the east bank of the river the approach will be built down Philadelphia St., which is a 100-ft. thoroughfare. The total cost of the bridge is estimated to be $800,000.

SANTA ANA, CAL.—The contract for the erection of a bridge on Main St., across Santiago Creek, has been let by the city to the MERCEREAU BRIDGE & CONSTRUCTION CO., of Los Angeles, at $9,392. The plans provide for a bridge to accommodate the electric line as well as the wagon traffic. The structure is to be 36 ft. wide. The Pacific Electric Company will bear a portion of the expense. Representatives of the contractors will meet with the Council and decide on the date when work shall be commenced.

PALO ALTO, CAL.—The contract for the construction of a bridge over San Francisquito Creek at Pope St. has been let to JOHN J. WILLIAMS, San Jose, Cal., at $4,089.

SACRAMENTO, CAL.—The Southern Pacific Co. has had plans prepared for construction of a bridge over the Sacramento River at this city. T. R. Jones, Sacramento, is Div. Supt.; F. C. Miller, Sacramento, is Res. Engr.; G. W. Rear is Gen. Inspector of Bridges at San Francisco, Cal.

CHICO, CAL.—A bridge will be built by the Northern Electric Co. near the Horsehead lands, which are under lease to Chico Nursery Co., at the old bridge site. The Northern Electric Co. will build a bridge regardless of where the County may build its crossing. The County does not expect to have its bridge completed before end of next summer.

TORONTO, ONT.—A high level bridge will be built across the Don River and the tracks of the Canadian Pacific Railway and Grand Trunk Railway at the junction of King and Queen Sts., Toronto. C. H. Rust is City Engr.

NEW WESTMINSTER, B. C.—A bridge will be constructed at once by the Provincial Government across the Squamish River, about 26 miles from its mouth. The bridge will be entirely of wood, and will cost about $7,000. J. Sprott, Government Road Supt., has stated that he proposes to ask Government to purchase a small saw mill to be used in the construction of the bridge.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

BRIDGEPORT, CONN.—S. S. Sanford is to erect a 5-story brick, terra cotta and steel building at Main and Cannon Sts. Isaac H. Allen, Jr., Hartford, Conn., is Arch.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 11 a. m., Dec. 26, for the general construction of new public school 5, on Tillary, Lawrence and Bridge Sts., Boro. of Brooklyn, and for installing heating and ventilating apparatus in new public school 8, on Hicks St., between Poplar and Middagh Sts., Boro. of Brooklyn; also for installing heating and ventilating apparatus in new public school 104, 92d St. and Gelston Ave., Boro. of Brooklyn, and for installing electric equipment in Eastern District high school, on Marcy Ave., between Rodney and Keap Sts., Boro. of Brooklyn.

A. W. Ross, Arch., 131 Livingston St., has prepared plans for an extension to the public school building on Gates, near Stuyvesant Ave., to be five stories high, 106 × 62 ft., brick, stone and concrete. Estimated cost, $155,000.

NEW YORK, N. Y.—Plans have been made by F. H. Pfluger, 32 Union Square, for an 11-story brick, stone and iron building to be erected at 330-32 Fourth Ave. for Mrs. P. Friedeberg, 2304 Bethford Ave. Estimated cost, $150,000. Estimates are now being taken.

ROCHESTER, N. Y.—Plans have been prepared by Esenwein & Johnson, Archs., 781 Ellicott Square, Buffalo, N. Y., for a hotel building to be erected at Rochester and to be managed by H. M. Gerrans, Buffalo. Estimated cost, $900,000.

ATLANTIC CITY, N. J.—Plans have been prepared by S. H. Vaughn, Arch., Bartlett Bldg., for a hall and lodge building for the local Order of Elks. It is to be a 4-story brick, stone and steel building. Estimated cost, $100,000.

ORANGE VALLEY (Orange post-office), N. J.—Plans have been prepared for a church to be erected at Nassau and Valley Sts. by the parish of the Church of Our Lady of the Valley. Estimated cost, $100,000.

CARLISLE, PA.—Bids were received Dec. 10 at the Indian Office, Washington, D. C., for the construction of Hospital No. 23, Carlisle Indian School, Pa. The only bid received was that of Harry G. Brown, Carlisle, Pa., at $27,490.

LANCASTER, PA.—Plans and specifications have been prepared by Newman & Harris, Archs., 2215 Land Title Annex Bldg., Philadelphia, for a building to be erected for the Franklin and Marshall Academy. The building will be 128 × 40 ft., with two wings, 40 × 72 ft. each. Estimated cost, $300,000.

PHILADELPHIA, PA.—WILLIAM STEELE & SONS, 1600 Arch St., have been awarded the contract for the erection of a 6-story warehouse, 165 × 200 ft., for the Acme Tea Co. on the site from Willow to Noble St. and York Ave. to Fourth St. Estimated cost, $300,000.

A permit has been issued to the THOMPSON-STARRETT CO. for the erection of the Adelphia Theater, at 143 and 145 North Broad St., adjoining the Lyric. The building will be three stories high, 62 × 122 ft. in dimensions, of brick, with limestone trimmings, fireproof construction and will be surmounted with a roof garden. The cost is estimated at $175,000.

Bids are asked by Berwind & Hoopes, 5603 Haverford Ave., for the erection of a 6-story flat building to be erected at 46th and Walnut Sts. It is to be of reinforced concrete and brick, 100 × 100 ft.

PHILADELPHIA, PA.—Plans are being prepared by Wm. S. Vaux, Arch., Bailey Bldg., for a 4-story reinforced concrete, fireproof building to be erected at Sixth and Cherry Sts. for Dill & Collins.

SCRANTON, PA. — MATTHIAS STIPP, Board of Trade Bldg., has been awarded the contract for the erection of a Memorial House for Martin Maloney, of Philadelphia. It is to be a 3-story brick and stone building. Estimated cost, $200,000.

Bids are asked by H. J. Blackwood, Arch., 126 North Washington Ave., for the erection of a 3-story brick and steel fireproof museum for this city. Estimated cost, $100,000.

WASHINGTON, D. C.—See under Light and Power Plants.

WASHINGTON, D. C.—Elliott Woods, Supt. of Construction, United States Capitol Buildings and Grounds, has rejected, as excessive, all bids received Nov. 21 for furnishing the interior marble work in the Senate Office Building. A re-advertisement will be issued in a few days.

Bids were opened Dec. 15 at the Office of Elliott Woods, Superintendent of the U. S. Capitol Grounds and Buildings, Washington, D. C., for furnishing the steel framing incident to the construction of the United States Senate Office Building, Washington. Bids were as follows: American Bridge Co., $39,990; Interstate Engineering Co., Cleveland, Ohio, $55,700; Barber & Ross, 12th and G Sts., N. W., Washington, $41,615; Jones & Laughlin Steel Co., Pittsburg, $41,530.

Sub-bids are asked by James L. Parsons for the erection of the Congress Hotel at New Jersey Ave. and C St. It is to be a 5-story brick, stone and steel building of fireproof construction. Estimated cost, $300,000. Hadding & Upman, 729 15th St., N. W., are Archs.

Plans are being prepared by L. Norris, Arch., 808 17th St., N. W., for a 4-story brick, stone and steel addition to the McKinley Manual Training School at Seventh St. and Rhode Island Ave. It is to be of fireproof construction. Estimated cost, $130,000.

WASHINGTON, D. C.—Plans are being prepared by Jas. H. Warner, Arch., 13th and F Sts., N. W., for a 6-story apartment house at 1125 14th St., N. W., for C. R. Riley. It is to be of brick, stone and steel, 40 × 130 ft.

BALTIMORE, MD.—Joseph E. Sperry, Arch., Calvert Bldg., is preparing plans for two 8-story warehouses to be erected at Scott and Wicomico Sts. for the Baltimore Bargain House Co. They are to be of brick, stone and steel and will have elevators, steam heating and electric lighting, and will be of fireproof construction.

WHEELING, W. VA.—The contract for the erection of a $400,000 passenger station to be erected by the Baltimore & Ohio R. R. Co. has been awarded to ROYDHOUSE, AREY & CO., of Philadelphia. The plans show the station will be modern in every detail, and superior to any passenger depot in any city the size of Wheeling. It will be three stories high, with an attic. The structure will be of brick, stone and steel and will be fireproof throughout. It will be 90 × 250 ft. There will also be a power plant with a brick chimney 125 ft. high. There will be four elevators in the station, two for passengers and two for freight. M. A. Long, Baltimore, Md., is Arch.

WRIGHTSVILLE, N. C.—It is reported that T. B. Cotter, of Boston, Mass., and associates, contemplate erecting hotels at Wrightsville and Wrightsville Beach, expending $1,500,000.

COLUMBUS, OHIO.—It is reported that revised plans have been received from Washington for the $100,000 hospital to be erected at Columbus Barracks. The building is to be two stories high and of pressed brick construction.

EVANSVILLE, IND.—A 10-story office building is to be erected here by the American Society of Equity. Estimated cost, $250,000.

INDIANAPOLIS, IND.—The Central Union Telephone Co. has awarded the contract for its new building at New York and Meridian Sts. to the WESTLAKE CONSTRUCTION CO., 737 Lemcke Bldg. The building will cost $400,000 and under the contract will be completed June 1. The BROWN-KETCHAM CO., of Indianapolis, will do the structural work.

PORT HURON, MICH.—The Board of Education and George L. Harcey, Arch., have awarded contract for high school building to FREUCHTEL & SCHEURMAN, of Saginaw, Mich., for $104,000.

CHICAGO, ILL.—The Bell Telephone Co., 17th and Filbert Sts., will have plans prepared for a 10-story brick, concrete and steel office building. Estimated cost, $500,000. Power plant will be installed.

J. H. Windrim, Arch., Commonwealth Bldg., is preparing plans for a 12-story brick, steel and concrete office building to be erected by the Girard Estate at Fifth and Chestnut Sts. Estimated cost, $1,000,000.

Montgomery Ward & Co. will erect an 8-story steel and concrete building in this city. Estimated cost, $1,500,000. It is to be 717 × 269 ft.

SUPERIOR, WIS.—The Supervising Architect of the Treasury has awarded to ALLAN BLACK CO., St. Paul, Minn., contract for installing the heating apparatus in the post-office, Superior, Wis., at $10,229.

DES MOINES, IOWA.—Plans are being prepared for the new post-office building to be erected here at a cost of $500,000.

MINNEAPOLIS, MINN.—Dr. G. G. Eitel, of this city, is going to erect a hospital at Willow and 14th Sts., at a cost of $100,000. L. A. Lamoreaux, 1108 Lumber Exchange, is Arch.

LINCOLN, NEB.—E. Brielmaier & Sons, Archs., 602 Second St., Milwaukee, Wis., will prepare plans for the Catholic Cathedral to be erected here at 14th and K Sts.

OMAHA, NEB.—The contract for the erection of the Roman Catholic cathedral at 40th and Burt Sts. will be awarded in the spring. Estimated cost, $1,000,000.

CHEYENNE, WYO.—Bids are asked by Capt. V. K. Hart, Q. M., until 11.30 a. m., Jan. 14, for constructing, plumbing, steam heating, electric wiring, etc., in various buildings at Fort D. A. Russell. (Advertised, Engineering News.)

KANSAS CITY, MO.—Bids were opened Dec. 10 at the Office of the Supervising Architect, Treasury, Washington, D. C., for the installation of a hydraulic mail lift at the post-office building at Kansas City, Mo., as follows: Otis Elevator Co., New York, $5,110; Feb. 15, 1907. Marine Engine & Machine Co., New York, $9,248; March 10. Brodesser Elevator Co., Milwaukee, Wis., $4,600; March 10.

ST. LOUIS, MO.—Mayor Wells on Nov. 27 signed the bill authorizing the issue of $11,200,000 bonds to be used as follows: Hospitals, $800,000; insane asylum, $1,000,000; fire department, $230,000; police, civil, criminal and other courts and police headquarters and health department headquarters, $2,000,000.

The contract for the erection of the Second Baptist church, on King's Highway, has been awarded to the BLACK CONSTRUCTION CO. Cost, $200,000.

Plans have been prepared by Brnett, Haynes & Barnett, Archs., Frisco Bldg., for the erection of the new Catholic cathedral for the Archiepiscopal. Estimated cost, $2,500,000.

ST. JOSEPH, MO.—Bids were opened Dec. 11, at the Office of the Supervising Architect, Treasury, for the installation of one electric passenger elevator and hydraulic freight lift at the post-office, St. Joseph, Mo., as follows: A. Kieckhefer Elevator Co., Milwaukee, Wis., $6,500; April 10, 1907. Otis Elevator Co., New York, $8,190; May 18. Brodesser Elevator Co., Milwaukee, Wis., $10,900; April 15.

HOT SPRINGS, ARK.—Plans have been prepared by J. W. Golucke & Co., Archs., Temple Court, Atlanta, Ga., for a $100,000 high school building to be erected here. It is to be a 3-story building, to be constructed of brick and stone. Contract will be awarded about Feb. 1, 1907.

DALLAS, TEX.—C. W. Bulger, Arch., is preparing plans for two extra wings to the Baptist Sanitarium, to cost $150,000 each.

LOS ANGELES, CAL.—Charles P. Whittlesey, Arch., 404 Douglas Bldg., has plans prepared for a reinforced concrete and fireproof store and office building to be erected by Meyer Lissner on Spring St., between Fifth and Sixth Sts. Estimated cost, $125,000.

SAN FRANCISCO, CAL.—It is reported that the contract for the erection of the reinforced concrete warehouse for James Drennan in this city has been awarded to RICHARDS-NEUSTADT CONSTRUCTION CO., of this city. The building will be on Spear St., near Mission. It will be two stories high and basement, and will cost $130,000. Hunt & Grey, 1017 Braly Block, Los Angeles, are the architects.

O. G. Traphagen, Arch., has completed plans for a handsome 7-story class A building which will be erected for the estate of Andrew Welch Co. on California St., between Battery and Front Sts.

S. L. Goldstein has applied to the Board of Public Works for a permit to erect a 7-story brick building on O'Farrell St., between Mason and Taylor Sts., at a cost of $122,000.

The Irving M. Scott Estate has applied for a permit to build a 5-story hotel on Ellis St., between Powell and Mason Sts. The hotel will be a brick structure and cost $100,000. Coxhead & Coxhead, 731 Sutter St., are the Archs.

TALKLAI, ARIZ.—Bids are asked until 2 p. m., Jan. 16, 1907, by C. F. Larrabee, Act. Comr. of Indian Affairs, Dept. of Interior, Washington, D. C., for the erection of a stone mess-hall at the Rice Station School.

SALT LAKE CITY, UTAH.—Plans are being prepared for a large hotel building to be erected on East Third St. Henry Phipps is interested. Estimated cost, $200,000.

MONTREAL, QUE.—A 2-story addition will be erected to the Arena, at a cost of $75,000.

QUEBEC, QUE.—The Canadian Pacific Railway Co. has definitely decided to demolish the Chateau Frontenac and erect a more modern structure, at a cost of $1,000,000.

KENORA, ONT.—A syndicate of local capitalists has been formed for the purpose of erecting a $100,000 hotel with 126 rooms. C. C. Delbridge, Kenora, Ont., is interested.

HAMILTON, ONT.—The Fire, Water and Light Committee is preparing a by-law to provide $30,000 for the building of a new fire hall.

OTTAWA, ONT.—The contract for the erection of the new wing to the Parliament Buildings has been awarded to McGILLIVRAY & LABELLE, Ottawa. Price, $235,000.

Competitive plans for the new departmental and justice buildings will be received by the Department of Public Works until April 15. The cost of the justice building is not to exceed 35 cts. per cu. ft. and the cost of the departmental building 30 cts. a cu. ft. The building is not to exceed five stories in height above the basement and the offices are to be set off in units suitable for subdivision. The justice building may be three or more stories in height. Quarters are to be furnished for the Supreme and Exchequer Courts, Railway Commission and Department of Justice. Prizes will be awarded as follows: Best design, $8,000; second, $4,000; third, $2,000; fourth, $1,000. Fred Gelinas is Secy. of the Department of Pub. Wks.

TORONTO, ONT.—Pearson & Darling, Archs., Imperial Bank Bldg., will prepare the plans for the $1,000,000 hospital to be erected here opposite Queen's Park. Plans will be completed in about two months.

WINNIPEG, MAN.—The congregation of St. John's Anglican Church will erect a new cathedral, at an estimated cost of $350,000.

EDMONTON, ALTA.—Bids are asked until Dec. 27, by Fred Gelinas, Secy. of the Dept. of Pub. Wks., Ottawa, for the construction of a heating system in the immigration building here.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

SPRINGFIELD, MASS.—**We are officially** advised that work will be started on the water supply for this city, from Little River, the City Council having authorized a bond issue amounting to $540,000, on Dec. 10, for that purpose. A total of $2,000,000 will be expended. The area of the Little River Water-shed is 47 sq. miles, while the total area tributary to the present Ludlow Water-shed is 20 sq. miles. It is proposed to construct a distributing reservoir at an elevation which will raise the pressure materially in the resident portion of the city. Hazen & Whipple, 220 Broadway, New York, N. Y., are Consult. Engrs. Elbert E. Lochridge is Engr. Water Dept.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Dec. 28, by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for laying mains in various streets in the Boroughs of Queens and Brooklyn.

TROY, N. Y.—We are officially advised that the following bids were received Dec. 11, by the Board of Contract and Supply, for reconstructing spillway and building roads at the Tomhannock Reservoir: Besch & Beebe, $69,847; Russel Contracting Co., 156 Fifth Ave., New York, $71,914; M. Fitzgerald, $74,033; McDONOUGH CONSTRUCTION CO., Troy (awarded contract), $59,100. The bids received for constructing guard rails were as follows: G. W. Wilkins & Sons, $9,904; William Spaliner, not complete; Alfred Colombo, $12,264; McDonough Construction Co., $10,957; Michael Fitzgerald, $13,959; John Flynn, Jr., $10,343; Nial Bros., $15,874; George W. Dempsey, $14,253; Besch & Beebe, $11,826; Rice & Morrissey, $14,193. E. L. Grimes is Ch. Engr., Bureau of Water Supply, 47 State St., Troy; William H. Shields is Supt. W. Wks.

BLOOMFIELD, N. J.—Bids probably will be received about Feb. 1 for laying new water mains. Cost reported to be about $11,000. William L. Johnson is Town Clk.

GLEN GARDNER, N. J.—MARCUS S. WRIGHT, of South River is reported to have secured contract for a water supply system for the sanitarium at Glen Gardner, at $13,919. Morris R. Sherrerd is Consult. Engr., Newark.

MEADVILLE, PA.—Bids are asked at the office of the Water and Light Department, Henry Ellsworth, Supt., until Jan. 15, for furnishing and erecting complete on foundations at the pumping station in Vernon Township, a triple-expansion, condensing direct-acting steam pump of 2,500,000 gallons daily capacity; also one pump of same type, 3,000,000 gallons capacity.

READING, PA.—It is reported that on Dec. 10 the Board of Water Commissioners submitted its report on the improvement of the water supply, and estimates the cost as follows: Bernhart filters, $107,300; Maidencreek filters, $400,000; curbing and grading at Antietam filters, $3,000; driveways and grading at Maidencreek pumping station, $2,500; lighting plant at Maidencreek pumping station, $3,500; pumping main from Centre Turnpike to Bernhart reservoir, $47,500; completion of 36-in. pumping main from present end to Fifth and Richmond Sts., $131,790; relining and covering Buttonwood St. reservoir, $15,000; supply main from Bernhart reservoir to Kutztown Road and Hiester's Lane, $43,500; covering Penn St. reservoirs, $25,000; low-service trunk line from Center Ave. and Amity St., to River Road and Buttonwood St., $39,940; core wall and outlet chamber, Hampden reservoir, $75,000, and covering Hampden reservoir, $80,000. Total cost, $974,030. Emil L. Nuebling is Supt. and Engr. of Water Dept.; Elmer H. Beard is City Engr.

PHILADELPHIA, PA.—The contract for the installation of the six new boilers at the Lardner Point Pumping Station No. 2 has been awarded recently by Director of Public Works Hathaway to the EDGEMOOR IRON CO., whose bid was $54,000. The new boilers will be self-automatic stokers and will be put in at once.

RICHMOND, VA.—It is reported that J. L. LINDSAY, on Dec. 3, was awarded contract by the Committee on Water, to furnish Keystone meters, as follows: ⅝-in., $7.97; ¾-in., $11.97, and 1-in., $15,96. Other bidders were: H. B. Freshkorn, Hersey disc meters, ⅝-in., $8.40; ¾-in., $12.60; 1-in., $16.80; G. & A. Bargamon Co., Lambert meters, ⅝-in., $8.40; ¾-in., $12.60; 1-in., $16.80; Southern Railway Supply Co., Trident meters, ⅝-in., $8.40; ¾-in., $12.60; 1-in., $16.75; Smith Courtney Co., Worthington disk meters, ⅝-in., model B, $6.57; model C, $7.13; ¾-in., $11.52; 1-in., $15.37. W. B. Bates is City Engr.; C. E. Bolling is Supt. W. Wks.

PARSONS, W. VA.—Elk Lick Water Co., 622 Court St., Reading, Pa., has franchise to install gravity system of water-works.

PINEVILLE, N. C.—C. G. Hubble, Des. Engr., Charlotte, N. C., advises us that the water system to be constructed at Pineville for the Dover Yarn Mill, as noted in issue of Dec. 13, will cost about $5,000. The water will be conveyed about a quarter of a mile. The well plant has been completed and the pipe and reservoir work will be done at once.

ANDREWS, N. C.—It is reported that the town has voted affirmatively the proposed $12,000 water and sewer bond issues.

PELHAM, GA.—See under Light and Power Plants.

TUSCALOOSA, ALA.—The city has voted affirmatively a $125,000 bond issue for construction of water-works. F. G. Blair is Mayor.

NATCHEZ, MISS.—The Water-Works Commission has decided to construct a wooden reservoir of 150,000 gallons capacity. Krumbhaar & Aiken, New Orleans, are Des. Engrs.

PINEVILLE, LA.—Bids are asked until Jan. 15, by O. F. Huddle, Mayor, and Board of Aldermen, for constructing a system of water-works.

NORWOOD, OHIO.—Bids are asked by the Board of Public Service until Jan. 7, for furnishing and delivering 1,000 ⅝-in. water meters and connections, to be delivered in quantities of 100 or more as ordered.

Bids are asked until Dec. 31 for extending water mains in Beech St., Highland Ave. and the Elsmere East Sub-division. About 6,300 lin. ft. of pipe will be needed. J. A. Stewart, 813 Traction Bldg., is City Engr.; L. H. Gebhart is Clk.

ALLIANCE, OHIO.—JOHN CALKINS has been awarded the contract for drilling test water wells for the city water-works plant, at $5,000.

CUYAHOGA FALLS, OHIO.—The Council has authorized a $10,000 expenditure for new apparatus in the pumping and lighting station.

NEWARK, OHIO.—The American Light & Water Co., Kansas City, Mo., which has the contract for the building of the new water-works system, has notified the Board of Public Service that it has decided to take up the construction itself, and has revoked the contract, which had been sub-let to the Phoenix Construction Co., of Pittsburg.

MUSKEGON, MICH.—Bids are asked by the Water Commission until Jan. 28, to furnish the city with two pumping engines, steam or electric power, one of 6,000,000 gallons daily capacity and one of 10,000,000 gallons.

SPRINGFIELD, ILL.—The Desnoyer Shoe Co. will build a steel water tower and tank for fire protection. Estimated cost, $12,000.

MOUNT PULASKI, ILL.—We are officially advised that contract for constructing ditch in Lake Fork Special Drainage District, in Logan County, has been let to BIRKS & KUCKS, of Latham, Ill., at 7.09 cts. a cu. yd. There were about twenty other bidders. The work consists of 750,000 cu. yds. of excavation.

WESTSIDE, IOWA.—The DES MOINES BRIDGE & IRON CO., of Des Moines, has secured the contract for constructing water-works, at $11,370.

MITCHELL, NEB.—Bids are asked until Jan. 24, 1907, at the office of the U. S. Reclamation Service, Mitchell, Neb., for furnishing steel and cast-iron for use on the North Platte irrigation project, Neb. About 125,000 lbs. of steel bars for reinforcement of concrete, about 16,000 lbs. of structural steel, and about 50,000 lbs. of cast-iron gates, guides, stands, etc., are required.

BERTRAND, NEB.—Bids will be received about Jan. 1 for the construction of water-works. Probable cost, $12,000. W. M. Turney, of Alma, is Engr.; D. C. Olmsted is Village Clk.

MANDEN, N. DAK.—The Northern Pacific Ry. Co. proposes to establish a water system here, at a cost of $60,000. W. L. Darling, St. Paul, Minn., is Ch. Engr.

CARRINGTON, N. DAK.—Loweth & Wolff, First National Bank Bldg., St. Paul, have completed plans for water system; the question of issuing bonds will be submitted to the voters.

LAKE ANDES, S. DAK.—Will Bruce, of Yankton, S. Dak., has been engaged to draw plans for a water-works system at this town.

DAKOTA CITY, S. DAK.—The Northwestern R. R. Co. is making preparations to drill an artesian well, six miles this side of Dakota City, near the location of a new townsite. The work will begin at an early date.

WINDCAVE, S. DAK.—It is reported that a water-works system is to be provided for Windcave, at a cost of $4,000.

FORSYTH, MONT.—This town has voted bonds amounting to $45,000 for a system of municipal water-works and sewerage.

ROLLA, MO.—Bids are asked until Jan. 7, 1907, for constructing water-works here. Estimated cost, $48,000. McRae & Harris, of Rolla, are Engrs.

ADA, IND. T.—Bids are asked until Dec. 28, by A. P. Wood, Mayor, for supplying Ada with Portland cement, electricity-operated pumping engines, valves and sluice gates and 8,000 ft., each, of 8 and 10-in. water pipes. The O'Neil Engineering Co., Dallas, Tex., prepared the specifications.

TRINIDAD, COLO.—Articles of incorporation of the Badito Reservoir, Irrigation & Land Co. were filed in the office of the County Clerk here on Dec. 7. The names of P. J. Lesser, Joseph Bair and I. N. Bair appear on the papers as the incorporators. The company proposes to build reservoirs for the purpose of irrigating lands in Huerfano, Pueblo, Otero and Las Animas Counties. The capital stock is $8,000,000. The water is to be taken from the water-shed of the Huerfano River in the western part of Huerfano County. Besides irrigation, water will be used for power and manufacturing purposes in mines and mills. P. J. Lesser, Joseph Bair, I. N. Bair, H. B. Silverstein, J. Vaughn Sickman, D. Vance Sickman and A. P. Sickman are named as directors. The offices and the principal place of business will be in Denver.

GRANITE, COLO.—Bids are asked until 11 a. m., Jan. 22, by George A. Kilgore, Secy. Otero Irrigation District, at La Junta, Colo., for construction of reservoir embankment, near Granite, Chaffee County. A. D. Best is Pres.; George G. Anderson is Consult. Engr., Equitable Bldg., Denver. (Advertised, Engineering News.)

ARTESIA, N. MEX.—The AMERICAN LIGHT & WATER CO., New England Bldg., Kansas City, Mo., has been awarded contract for constructing water system.

NORTH YAKIMA, WASH.—The Common Council has granted a franchise to Jesse H. Rose and his associates to construct and maintain for 50 years a system of water-works for the distribution of artesian well water.

SEATTLE, WASH.—The Board of Public Works on Dec. 4 awarded the following contracts: Eighth Ave., south, water mains to the SPARGER CONCRETE CO., Colman Bldg., $36,945; East Harrison St., concrete walks, to the SPARGER CONCRETE CO.; Grand Boulevard, grading sidewalks, curbing, etc., to STIRRAT & GOETZ, Bailey Bldg., $53,559; Boren Ave., north, sewer, PETER DINEEN, $2,005; Ninth Ave., north, sewer, PETER DINEEN, $2,351.

TACOMA, WASH.—Bids are asked until Dec. 29 by Owen Woods, Comr. Pub. Wks., for furnishing an air-lift pumping plant.

VALLEJO, CAL.—The city of Vallejo, which has already expended over $500,000 in the construction of a water system, is preparing to spend $10,000 more, to lay an additional submarine water main to the Mare Island Navy Yard.

BISBEE, ARIZ.—We are officially informed that the Bisbee-Naco Water Co., 25 Naco Ave., Bisbee, will make the following improvements: Install a Diezel engine to drive a new 1,000,000-gallon 3-stage centrifugal pump to be used at pumping station for pumping the water to the surface out of wells 170 ft. deep; build a 1,250,000-gallon earthen reservoir at the pumping plant; dig a tunnel from the bottom of present well about 500 ft. long in the water sand; put in 20,000 ft. of 10-in. line pipe and 20,000 ft. of 6-in. w. i. pipe; install a new electric pump for the relift in the city of Bisbee; put in several new steel storage tanks for distribution. A. M. Martin is Supt.

BRANTFORD, ONT.—The ratepayers will be asked to vote a by-law authorizing the expenditure of $40,000 for the erection of a pumping station.

WELLAND, ONT.—The water system of Welland will be enlarged. Pipe, specials and valves will be needed. Estimated cost, $16,000.

LONDON, ONT.—The city is considering the question of expending $570,000 for water-works extension. The source of supply will be at Komoka. Ormsby Graydon is City Engr.

BRACEBRIDGE, ONT.—The ratepayers will be asked to authorize the expenditure of $23,000 for improving the water supply.

ELMIRA, ONT.—This town will construct water-works system, to cost about $25,000.

MONTREAL, QUE.—The Superintendent of the Water Department estimates that it will cost the city about $2,000,000 to build an additional aqueduct from Lachine to the city and also to place the intake in the St. Lawrence River so far out that it would result in citizens being furnished with pure water. He further reports that if the aqueduct were built and city do all its pumping by water power, instead of by steam, there would be a greater saving to the city yearly. In addition to this, if the aqueduct were doubled in size the city would have enough of surplus energy to light all the municipal buildings, parks, etc., in the city. Noted, Dec. 13.

MAGOG, QUE.—The town of Magog will erect a pumping station for the civic water-works. The Town Engineer is making estimates and plans for the improvements.

WINNIPEG, MAN.—Bids are asked until 2.30 p. m., Mar. 1, by the Chairman of the Fire, Water and Light Committee, for supplying 30 miles of assorted water pipe and a quantity of specials. H. N. Ruttan is City Engr.; C. J. Brown is City Clk. (Advertised, Engineering News.)

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

BRIGHTON, MASS.—The following bids were received Dec. 14, for constructing part of Section 85 of High-Level Sewer at Brighton: Rowe & Perini, $57,080; Metropolitan Contracting Co., 95 Milk St., Boston, $56,200; Falvey & Kelley, $55,540; George M. Byrne Co., 7 Water St., Boston, $54,760; Coleman Bros., 15 Court Sq., Boston, $52,600; T. H. Gill & Co., 88 Broad St., Boston, $49,280. William M. Brown is Engr., Sewerage Works, Metropolitan Water and Sewerage Bd.

PROVIDENCE, R. I.—Bids are asked until 11 a. m., Dec. 21, by the Department of Public Works, for furnishing 6 to 12-in. sewer pipe, branch pipe, bends, flagstones, and granite inlet curbstones for catch-basins. Walter F. Slade is Comr.; Otis F. Clapp is City Engr.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Dec. 27, by the Park Board, for constructing sewers in Central Park, as follows: Constructing a pipe sewer and appurtenances from the cottage south of the 79th St. transverse road near the east drive to the brick sewer in the transverse road near Fifth Ave., for connecting the cottage by means of w.-i. pipes with the Croton main in transverse road and for building brick manholes on existing brick sewers in the vicinity of the proposed sewer. Moses Herrman is Pres. Dept. Parks.

WATERTOWN, N. Y.—Plans have been prepared for construction of a trunk sewer to drain the western portion of the city, to cost $80,000.

MEDINA, N. Y.—It is reported that plans have been prepared for construction of a sewer for the East Side. Cost, $40,000. Frederick K. Wing, White Bldg., Buffalo, is Engr.; W. B. Eckert is Village Clk.

DUNKIRK, N. Y.—We are officially informed that during 1907, the Common Council will consider the question of constructing a trunk sewer to prevent the city's sewage from going into Lake Erie. John T. Madigan is Mayor; Lewis N. Murray is City Clk.

MILLVILLE, N. J.—Millville has been ordered by the State Sewer Commission to construct a sewer system, to cost about $20,000.

BALTIMORE, MD.—We are officially advised that the BETHLEHEM STEEL CO., of South Bethlehem, Pa., has been awarded contract, at $450,000, for constructing sewage pumping system, for which bids were received Nov. 28. The contract calls for three 27,500,000-gallon pumps. Calvin W. Hendrick is Ch. Engr. Sewerage Comn.

BIRMINGHAM, ALA.—On Dec. 6 the Jefferson County Sanitary Commission, Title Guarantee Bldg., Birmingham, awarded contracts as follows: Contract for the construction of the Woodlawn line was awarded to C. M. BURKHALTER, at $7,333; contract for repairing the Village Creek sewer was awarded to DUNN & LALLANDE BROS., at $8,950.

The Commission voted to advertise for bids for construction of the Avondale branch of the Village Creek sewer. This branch will be about 1½ miles in length. Julian Kendrick is City Engr.

WINCHESTER, KY.—It is reported the city has voted to issue $40,000 in bonds for a sewerage system. Judge J. M. Benton is interested.

AKRON, OHIO.—The City Council has passed ordinance to issue bonds to the sum of $31,000 to pay for conduits at street intersections along Wolf Ledge Run for the Hickory St. sewer and a short main trunk sewer from Thornton St. to Bowery St. J. W. Payne is City Engr.

We are officially advised that on Dec. 10, M. H. O'Toole submitted the lowest regular bids for constructing the Miller and Jefferson Aves. sewers. J. W. Payne is City Engr.

PORTSMOUTH, OHIO.—It is reported that it is proposed to construct vitrified pipe sewers, at a cost of $14,000. B. C. Bratt is City Engr.; F. Musser is City Audr.

LEBANON, OHIO.—Contract for constructing trunk sewers, bids opened Dec. 7, has been awarded to SAMUEL MONROE & SON, of Portsmouth, at $3,884. Bids were received Dec. 7. M. E. Gustin is Village Clk.

CINCINNATI, OHIO.—The Board of Public Service has awarded to the KIRBY REALTY CO. a contract for construction of sewers in Forest, Ridgewood and Floral Aves., in a private right-of-way in East Norwood, and Beech St. The bid of this company was $20,810. With the construction of these sewers Norwood's trunk sewerage system, which is designed to prevent the pollution of Duck Creek, will be completed.

EAST LIVERPOOL, OHIO.—It is reported that plans and estimates are to be prepared at once for sanitary and storm sewers on several streets. One storm sewer alone on Sixth and Seventh Sts., will cost about $17,000. This sewer system will be built early in the spring. The South Side Land Company has made formal application for a franchise to construct a sewer system from Fourth to First Sts.

VINCENNES, IND.—The Indiana Sewerage & Drainage Co. has been incorporated to construct, own and maintain sewers and sewer systems in cities for the purpose of supplying the people thereof with drainage and sewer facilities. Orlando H. Cobb, W. J. Nicholson and D. W. Morton are Directors.

MICHIGAN CITY, IND.—The lowest bidder for construction of sewers in Tennessee St. was Arthur H. Snyder, at 59 cts. per lin. ft. H. M. Miles is City Engr.

EVANSVILLE, IND.—We are officially advised that over 1,700 ft. reinforced concrete sewers from four to six feet in diameter will be built in Kentucky Ave., at an average cut of 20 ft., costing about $320,000. Plans will be presented to the Superior Court for approval this month. William H. Temme, C. E., 908 Third Ave., Evansville, is Des. Engr.; James D. Sanders is City Engr.

RUSHVILLE, IND.—Alonzo L. Steward, City Engr., writes us that the sewers mentioned on Nov. 29 will be about eleven miles long and will range from 6 to 24-in. in size.

INDIANAPOLIS, IND.—Bids are asked until Dec. 24, for constructing North Indianapolis sewer. On Dec. 10 the Board of Public Works rejected all sewer bids received for this work on account of a legal point. Blain H. Miller is City Engr.

SOUTH HAVEN, MICH.—It has been decided to ask for bids for the construction of sewers on Hubard St.

DELAND, ILL.—Bids are asked by the Drainage Commissioners of Goose Creek Drainage District No. 1, Deland, until Dec. 22 for constructing a drainage system involving the use of about 20,000 ft. of various sized drain tile. J. B. Rhinehart is Town Clk, Deland; W. J. Day is Engr.-in-Charge, Bement, Ill.

DUNDEE, ILL.—Anderson & Scheflow, Engrs., Elgin, Ill., have been selected to make surveys and estimates for a sewer system for West Dundee.

TAYLORVILLE, ILL.—It is reported that the Board of Public Improvements contemplates constructing 1.2 miles of 14 to 16-in. tile sewer in Shawnee St. Estimated cost, $6,000. J. W. Dappert is Engr. and Chn. Bd. Pub. Impvts.

ROSEMOND, ILL.—Bids are asked by J. W. Dappert, Engr., Taylorville, Ill., until Jan. 2, for the construction of a 3-mile 8 to 16-in. tile drainage ditch for the Highway Commissioners, near Rosemond.

ROCK ISLAND, ILL.—On Dec. 3, the PEOPLE'S CONSTRUCTION CO., of Davenport, Iowa, was awarded the contract for the construction of the first section of the new Rock Island sewer system which is to be built in that city, at a cost of about $250,000. The contract price of the People's Construction Co. for the first section was $60,000. They will start work shortly and push it to completion.

BURLINGTON, IOWA.—Bids are asked until March 18 at the office of the City Clerk, for constructing a vitrified pipe sewer, known as the Locust St. sewer, with branches. J. F. Winters is City Engr.

CEDAR FALLS, IOWA.—Bids are asked until 7.30 p. m., Jan. 22, by the Sewer Committee, for constructing storm water sewers, about 3,768 ft. long, to be built of vitrified pipe and brick. (Advertised, Engineering News.)

WAPELLO, IOWA.—A 12-in. pipe sewer is proposed on Isett Ave., continuing into an 18-in. sewer. Estimated cost, $5,900.

PARSONS, KAN.—The PLUNKETT CONSTRUCTION CO., of Coffeyville, Kan., has been awarded contract for building the North End sewer, complete, at $12,950. Other bidders were: W. W. Cook & Son, of Junction City, and C. F. Medaris.

CAPE GIRARDEAU, MO.—Bids are asked until 8 p. m., Feb. 4, by the City Council, for constructing complete sewer system in Sewer District No. 1. George E. Chappell is City Clk.; Granbery Jackson is Engr., Nashville, Tenn. (Advertised, Engineering News.)

WACO, TEX.—The city has voted to issue $00,000 of bonds for extension of its sewerage system, upon which active work probably will be started at an early date.

SEATTLE, WASH.—See under Water Supply and Irrigation.

SAN DIEGO, CAL.—At a special meeting of the Board of Works, held Dec. 3, it was decided to advertise immediately for bids for constructing sewers on First, Second and Third Sts., from Palm to Walnut Sts., a distance of six blocks on each street. G. A. D'Hemecourt is City Engr.

OAKLAND, CAL.—Bids are asked until Jan. 2, by the Board of Works, for constructing sewers as follows: Main sewer in 45th St., Lawton Ave., 41st St. and Manila Ave., from Telegraph Ave. to the eastern boundary line of the city, estimated cost, $45,000. Main sewer in Market St., 45th, West and Grove Sts., from 36th and Market Sts. to 56th and Grove Sts.; $52,000. Storm sewer in Adeline St. from Temescal Creek to the northern boundary line, $20,000. Sewer in Brush St. and San Pablo Ave. from 22d and Brush Sts. to 29th St. and San Pablo Ave.; $11,500. The reconstruction and extension of the main lake sewer on 22d St. from Adeline St. to the U. S. Bulkhead line, $97,000. The extension of the 36th St. main outlet sewer from the western end of the existing sewer to the U. S. Bulkhead line; $48,000. F. C. Turner is City Engr.

SAN FRANCISCO, CAL.—The Board of Works has awarded contract for building a storm water sewer in Harrison St., between Fourth and Sixth Sts., to J. J. DOWLING, the lowest bidder, whose figure was $9,989. Thomas P. Woodward is City Engr.

TORONTO, ONT.—Plans for the trunk sewer system of this city have been submitted to the Provincial Board of Health. The Board has approved the section of intercepting sewers as far east as Woodbine Ave. This will involve construction work to occupy at least three years, and the question of outfall and the final disposal of the sewage is left to be determined later. C. H. Rust is City Engr.

WELLAND, ONT.—It is reported that the city will extend its sewer system, at a cost of about $15,000.

BRAMPTON, ONT.—A sewer system will be installed at Brampton which it is estimated will cost about $32,000.

HAMILTON, ONT.—It is proposed to construct sewers and a sewage disposal plant here, upon which about $100,000 will be expended.

STRATFORD, ONT.—It is reported that about $16,500 is to be expended upon a sewer system for this town.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

LEE, MASS.—It is proposed to raise $15,000 for the construction of a State road around the divide between the Housatonic and the Cumberland Rivers, known as "Jacob's Ladder," in Becket. State Highway Commission is to make a survey.

NEW YORK, N. Y.—Bids are asked by the Park Board until 3 p. m., Dec. 27, for constructing that portion of St. Nicholas Park south of 135th St. Moses Herrman is Pres. Dept. of Parks.

NIAGARA FALLS, N. Y.—Bids are asked until 3 p. m., Dec. 27, by the Board of Public Works for paving Ashland Ave., from Whirlpool to Main Sts. Estimated cost, $9,686. Walter McCulloh is City Engr.

ALBANY, N. Y.—The ordinance, passed by the City Council, authorizing the extension of Judson St., from the north line of Livingston Ave., to Manning Boulevard, has been approved by Charles H. Gaus, Mayor. Walter Melius is City Engr.

NEWARK, N. J.—We are officially advised that bids received Dec. 12 by the Committee on Roads and Assessments for paving in Bloomfield, Nutley and other towns were not opened. W. E. Christian is Clk.

ATLANTIC CITY, N. J.—On Dec 10 G. P. MURRY, of Brooklyn, was awarded contracts by the City Council to the amount of $162,000, for paving crosstown streets.

ATLANTIC CITY, N. J.—The Mayor is reported to have passed ordinances providing for the issue of $10,000 of bonds for constructing sidewalks and $15,000 of bonds for paving Tennessee and Mansion Aves.

TITUSVILLE, PA.—We are officially advised that the "city has under consideration 22,500 sq. yds. of paving on Main St., and 4,575 yds. on Brook St. Bids will be asked in the spring for asphalt block, sheet asphalt, brick and wood block. There will also be about a mile of small diameter sewer next season." H. A. Holstein is City Engr. W. M. Dame is City Clerk.

BUTLER, PA.—It has been decided to defer the paving of Pierce St. until early in the spring, as water pipes are now being laid in that thoroughfare.

NORRISTOWN, PA.—Bids for reconstructing (a) Lower Merion Road, and (b) Towamencid Road, in Montgomery County, are reported to have been opened on Nov. 23 by State Highway Department, at Harrisburg, as follows: Theobald Harsch, Narberth, (a) $8,331; Dawson & Davis, of Devon, (a) $8,696, (b) $12,237 and $11,006; McCormick & Co., Philadelphia, (a) $9,174, (b) $13,805; F. W. Bornemann & Co., of Lansdowne, (a) $8,009 Frazier Construction Co., of Philadelphia, (a) $9,613; William C. Evans, of Ambler, (b) $14,491 and $12,131; Davis & Co., of Philadelphia, (b) $13,806, and John Jones, of Spring City, (b) $9,097.

SOUTH BETHLEHEM, PA.—The WARREN BROS. CO., 93 Federal St., Boston, was awarded the contract to pave three streets by the South Bethlehem Borough Council on Dec. 10, the style of paving to be determined by the Borough Engineer and Street Committee.

WILKES-BARRE, PA.—W. J. CAHOON & CO. has secured contract to pave Kidder St., at $1.90 per sq. yd., and to supply curbing at $1.79 per lin. ft.

BEALLSVILLE, PA.—The contract for constructing new State Road through Beallsville Borough has been let by the State Highway Commissioner to N. C. HUNTER, of Brookville. The length is 8,500 ft., and the lowest bid was $16,248.

FRANKLIN, PA.—JOHN L. HANNA, of Franklin, has been awarded the contract for constructing 6,400 ft. of macadamized road in Hempfield Township, at $13,485.

NORFOLK, VA.—The Jamestown Boulevard Commission, at a special meeting held Dec. 13, authorized W. T. Brooke, City Engr., to let the contract for the grading of the city end of the boulevard just as soon as the Mayor approves the boulevard ordinance. As soon as the ordinance is signed the contract will be let to R. P. DENBY, who has agreed to do the work at a rate of 25 cts. a cu. yd. The work is to be done, however, under the supervision of the City Engineer.

NORFOLK, VA.—Bids are asked until noon, Jan. 10, 1907, by H. B. Goodridge, Chn. Boulevard Comn., for improving a part of Colonial Ave. and Jamestown Ave.; also for constructing a macadam road on Colley Ave., Norfolk. W. T. Brooke is City Engr. (Advertised, Engineering News.)

ROCKHILL, S. C.—The town plans to lay $40,000 worth of imitation stone sidewalks. John G. Anderson is interested.

BIRMINGHAM, ALA.—R. BLACKBURN, 1119 25th St. N., secured the contract on Dec. 5 for sidewalk paving, and DUNNE & LALLANDE BROS. for grading, curbing and concrete gutter paving, at $4,624.

KNOXVILLE, TENN.—JOSEPH ARMSTRONG has been awarded the contract to lay the granolithic paving in Piedmont Pl. addition. The contract calls for between 1,500 and 2,000 lin. yds. of sidewalk. Mr. Armstrong will begin at once laying the sidewalks in the new addition. W. C. Crozer is City Engr.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until noon, Dec. 21, for work under 16 contracts for improving sidewalks by regrading and repaving with artificial stone pavement. Bids will also be received at the same time for improving Grand Ave., between 28th and 26th Sts., by grading. Roger G. McGrath is Secy.

CLEVELAND, OHIO.—Bids will soon be asked to grade, drain, pave and curb the following streets: East 61st, Cowan, East 48th, East 64th, East 66th Sts., Doroy Road and Carpenter Ave. Paving bricks will be used. Glenwood and Butler Aves. will be paved with brick early in the spring. W. J. Carter is City Engr.

NEWARK, OHIO.—The contract for constructing 17,200 sq. yds. brick paving has been awarded to BRENNAN & NUTTER, of Newark, at $21,312. C. H. Wells is City Engr.

CINCINNATI, OHIO.—Bids are asked until noon, Jan. 4, by the Board of Public Service for grading, setting limestone and curbing in Lawrence Alley at an estimated cost of $5,267; and for laying concrete, asphalt and curbing on Betts St. at an estimated cost of $26,587.

August J. Henkel, 703 Mercantile Library Bldg., submitted lowest bid on Dec 12 for improving Seminole St., at $3,758. M. J. Keefe is Clk. Bd. Pub. Service; C. N. Dannenhower is Ch. Engr.

VERSAILLES, IND.—Bids are asked until Jan. 8 by Nicholas Volz, County Audr., for constructing roads as follows: Five miles, 4,200 ft. pike road in Laughery Township, estimated cost, $18,985; two miles, 3,170 ft. in Otter Creek Township, estimated cost, $6,885; two miles, 4,940 ft. in Brown Township, estimated cost, $9,497; one mile, 2,527 ft. in Washington Township, estimated cost, $5,000.

CLINTON, IND.—The Commissioners of Vermillion County are preparing to ask for bids for construction of 37 miles of gravel road in Clinton Township. The estimated cost is $40,000.

COLUMBUS, IND.—Bids are asked by the Commissioners of Bartholomew County until Jan. 8, 1907, for the construction of one mile of gravel road in Hawcreek Township. William A. Morris County Audr.

BLOOMINGTON, IND.—Bids are asked by the Commissioners of Monroe County until 2 p. m., Jan. 9, for construction of a gravel road in Van Buren Township. Length of road, 8,275 ft. S. M. Kerr is County Audr.

BLOOMFIELD, IND.—Bids are asked by the Commissioners of Greene County until 1.30 p. m., Jan. 8, for construction of gravel and macadamized roads in Wright Township. William A. Deckard, County Audr.

ROCKVILLE, IND.—Bids are asked by the Commissioners of Parke County until 1 p. m., Jan. 9, for construction of the following gravel roads in Penn Township: John W. Russell Road No. 2 and John W. Russell Road No. 3. Roads to be graded, drained, straightened, bridged and graveled. Henry Grubb is County Audr.

TERRE HAUTE, IND.—Bids are asked by the Commissioners of Vigo County until 11 a. m., Jan. 5, for improvement by grading and graveling of the following roads in Vigo County. Road No. 5 in Pierson Township, 2,509 ft. in length, and Road No. 8 in Riley Township, length of road, 10,490 ft. J. W. Denehie is County Audr.

KNOX, IND.—Bids are asked by the Commissioners of Starke County until Monday, Jan. 7, for construction of the gravel road known as the Sanpiere and Wheatfield Road in Railroad Township. Estimated cost, $6,006. L. M. Ransbottom is County Audr.

BEDFORD, IND.—Bids are asked by the Commissioners of Lawrence County until 1 p. m., Jan. 8, for construction of various gravel roads in this county.

DETROIT, MICH.—The construction of a boulevard from Detroit to Grosse Point, along the lake front, thence to Toledo, Ohio, a distance of 63 miles, is being considered by the Board of Aldermen.

STURGEON BAY, WIS.—A. C. Greaves, City Engr., has estimated the cost of paving portions of Garland, St. John, Spruce Sts. and Lauder Ave., with macadam, at $10,500.

INDEPENDENCE, MO.—We are officially advised that a large quantity of asphalt paving will be done in Independence in 1907. R. T. Proctor is City Engr.; T. W. Arnold is City Clk.

LITTLE ROCK, ARK.—It is reported that ZEB WARD has contract, at $16,049, for curbing, guttering and macadamizing West Twelfth St.

MARSHALL, TEX.—Arrangements are being made to spend $100,000 in improving several streets in Marshall.

DENTON, TEX.—Denton County is considering the issuance of $200,000 of bonds for improving roads.

TULSA, IND. T.—Bids are asked until Dec. 24 by the City for constructing 21 city blocks, or about 8,400 lin. ft., of street paving, to be some form of brick. W. D. Abbott is City Recr.

SEATTLE, WASH.—It is reported that the City will expend about $115,000 for regrading Fourth Ave. R. H. Thompson is City Engr.

The City Engineer is reported to have filed with the Secretary Board of Works estimates for the following improvements: Grading and curbing on North 55th St., $12,800, and grading and curbing on Thackeray Pl., $16,700.

SEATTLE, WASH.—See under Water Supply and Irrigation.

TACOMA, WASH.—B. W. KIBLER is reported to have secured the contract for grading and constructing sidewalks on Puget Sound Ave., at $9,730.

PORTLAND, ORE.—The contract for the improvement of Dekum Ave., from Piedmont Park to Columbia Heights, was awarded on Dec. 1 to STEVENS BROS., at $5,928, and HARRY HOWARD, $6,095, by the Executive Board. Douglas W. Taylor is City Engr.

SAN FRANCISCO, CAL.—The Board of Supervisors has recommended an appropriation of $1,500,000 for widening Dupont St., from Bush St. to Montgomery Ave.

OTTAWA, ONT.—The City will purchase an asphalt plant costing in the neighborhood of $10,000. E. R. Beckwith is City Engr.

TORONTO, ONT.—Bids are asked until noon, Jan. 8, by E. Coatsworth, Mayor and Chn. Bd. of Control, for construction of an asphalt plant. (Advertised, Engineering News.)

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

FALL RIVER, MASS.—It is reported that the American Thread Co. will erect a new mill in this city. Richard H. Cook is Gen. Supt.; Theodore M. Ives is Secy.-Treas., at 200 West Broadway, New York.

FITCHBURG, MASS.—The Fitchburg Yarn Co. has been organized for the manufacture of cotton yarn in this city. The capital is $600,000. The temporary officers are J. P. Lyman, Boston, Pres.; George P. Grant, Jr., Fitchburg, Vice-Pres. and Mgr. Herbert L. Wallace, of Fitchburg, is Treas.

PITTSFIELD, MASS.—It is reported that the General Electric Co. has completed arrangements for additions to the Stanley plant in this city, which will call for the ultimate expenditure of $2,000,000. The company's architects have prepared plans for six new buildings, work on which will begin next spring if present plans carry. These buildings are all to be of reinforced concrete and of large dimensions. M. F. Westover is Secy., at Schenectady.

NEW YORK, N. Y.—J. S. Kennedy, Arch., filed plans for the 1-story brick factory, 47.4 × 105 ft., which the Taylor Textile Mfg. Co., 41 Union Square, will build on the southwest corner of Bronxwood Ave. and 218th St. The cost will be $20,000.

ROCHESTER, N. Y.—A factory, 800 × 450 ft., will be erected by the Charlotte Paper Mill & Folding Box Co., estimated at $500,000. F. A. Stecker is interested.

ALIQUIPPA, PA.—It is reported that Jones & Laughlin, the independent steel operators, have awarded the contract for the erection of a new steel plant here and also blast furnaces to cost $7,000,000.

EASTON, PA.—H. K. Deishler, proprietor of the Kutztown Knitting Mills, will build an addition to his large factory. It will be a 2-story brick building.

PHILADELPHIA, PA.—It is announced that the Atwood Silk Throwing Mills, Plymouth, have notified H. T. Leasure, Secretary of the Erie Chamber of Commerce, that they accept their option on property in Erie. A factory, consisting of a 2-story brick building, with two separate power-houses, will be built in the spring, and it is expected to be in operation by fall.

Plans and detailed specifications have been completed by Milligan & Webber, Archs., 520 Walnut St., for the large factory at 15th St. and Washington Ave. for Bridgman Bros. & Co. The building, which will cost about $65,000, will be six stories high and will cover an area of 90 × 100 ft. It will be of reinforced concrete construction with exterior walls of brick.

MONESSEN, PA.—It is reported that the Pittsburg Steel Co. will erect a $7,000,000 addition to its plant at this place.

WILMINGTON, DEL.—The Maryland Vulcanized Fiber Co. will erect a large factory at Maryland Ave. and Oak St. as an addition to its present plant at that location, at a cost of $49,000. The contract has been awarded to the REINFORCED CONCRETE CONSTRUCTION CO., of Cleveland, Ohio. It is to be a 3-story building, 217 × 67 ft., and to be entirely of reinforced concrete.

BALTIMORE, MD.—The Gibbs Preserving Co., 2303 Boston St., will erect a 4-story concrete warehouse as an addition to its present plant.

NORFOLK, VA.—Eureka Brick Co., P. O. Box 185, recently incorporated, will have a daily capacity of 25,000 to 30,000 bricks. A building 30 × 60 ft. is to be erected. About $10,000 will be expended in building and equipment.

LAUREL, MISS.—The Padget Wagon Co. has increased its capital to $15,000 and will enlarge and improve its plant. George Bacon is Pres.; Henry Hilburn, Secy.-Treas.

NEW ORLEANS, LA.—F. Krauss & Sons, cotton manufacturers, will erect a 2-story brick and steel factory here at a cost of $20,000.

STURGIS, KY.—The West Kentucky Coal Co. will spend $1,000,000 on improvements to its plant. J. P. Morgan is Pres. of the company.

DAYTON, OHIO.—The Dayton Barrel Co. has been incorporated with a capital of $50,000 by D. C. and B. M. Dunne and H. M. Wilhelm. The company will erect a plant here.

BLUFFTON, IND.—The United States Mica Mining & Milling Co. will erect and equip a large plant in this city, to manufacture electric insulators of all kinds.

FRANKFORT, IND.—The Model Machine Works Co. has incorporated to build and establish a plant for the manufacture and repair of automobiles and accessories. Jas. P. Palmer, C. H. Hillis and A. A. Laird, directors.

MISHAWAKA, IND.—The Mishawaka Folding Carriage Co. has been incorporated with a capital of $50,000, to establish a large manufacturing plant. M. A. McIneery, C. A. Ostram and Wm. Snow are directors.

MUNCIE, IND.—The Otto Mfg., Repair & Storage Co. has incorporated to establish a manufacturing plant. J. C. McGormley, W. E. Sutton and G. D. Madoiex are directors.

NEW ALBANY, IND.—Plans and specifications are ready for bidders for the erection of a large malleable iron works plant in this city for the Todd Mfg. Co. The estimated cost is $200,000. A 12-acre site has been purchased. George D. Todd is Pres.

NEW CASTLE, IND.—The Maxwell-Briscoe Motor Co. has incorporated to build and equip a large factory in this city. Richard Irvin, Walter B. Horn, Henry E. Toby are incorporators.

PERU, IND.—The Kendalville Chair Mfg. Co. will ask at once for bids for the erection of a large plant on the site of the plant recently destroyed by fire. Estimated cost, $40,000. W. H. Booth is Gen. Mgr.

TERRE HAUTE, IND.—The Fort Harrison Lumber Co. has incorporated to construct, equip and operate mills for the manufacture of lumber and building supplies. Capital, $150,000. C. D. Pierson, Pres.; J. F. Pierson, Secy.

DETROIT, MICH.—The entire upper portion of the factory of the Michigan Lubricator Co. was destroyed by fire. Loss is estimated at $25,000. It will be rebuilt as the insurance is adjusted. R. H. Mitchell, 661-673 Beaubien St., is Secy.

CHICAGO, ILL.—William Ohlhaber, Arch., 134 Park St., has completed plans for a 5-story machinery building, 125 × 125 ft., to be erected for the William Gausclow Co. at Washington Boulevard and Morgan St. Estimated cost, $100,000.

JOLIET, ILL.—The Elgin, Joliet & Eastern Railway Co. will build an addition to the machine shop and erect a new blacksmith shop at a cost of $70,000. A. Montzheimer is Ch. Engr., at Joliet.

PEORIA, ILL.—The Todhunter & Alfs Co. are planning to build a new plant at Oak and Washington Sts., which will cost $20,000.

KENOSHA, WIS.—It is announced that the Simmons Mfg. Co. will build two 6-story buildings, additions to their plant here, to cost approximately $500,000, with machinery. The Chicago branch factory will be discontinued, machinery to be removed to Kenosha.

MILWAUKEE, WIS.—The Mason Shoe Mfg. Co., which was recently incorporated with a capital stock of $25,000, will erect a new plant. The incorporators are August Mason and others.

MINNEAPOLIS, MINN.—The Spencer Kellogg Co., of Buffalo, have purchased property in southeast Minneapolis, and will at once erect a linseed oil plant to cost $250,000. The plant will include a mill, machine shop and warehouse, all of brick and steel construction. Spencer Kellogg, Jr., Buffalo, N. Y., is Mgr.

The Schurmeier Wagon Co., Broadway and Pine Sts., St. Paul, has purchased property at Western Ave. and Ninth St. and will soon begin the erection of a wagon factory to cost $100,000. The building will be of brick and mill construction, three stories high.

A manufacturing plant will be erected by the American Briquetting & Mfg. Co., recently incorporated with a capital of $500,000.

The Uniform Stave & Package Co. has leased a site in the milling district and will erect a stave and box factory to cost $125,000. The building will be of brick and steel construction, five stories high, and work will begin in the early spring. C. E. A. Adams is Pres., 212 Lumber Exchange.

It is reported that Fownes Bros., a London, England, firm of glove manufacturers, have selected Minneapolis as the location of a manufacturing plant to cost $200,000. The concern, through W. G. Nye, 515 Andrus Bldg., its local representative, has secured an option on suitable property in northeast Minneapolis, and it is probable that the company's decision will be made public within a few days.

COFFEYVILLE, KAN.—The Spring Steel Wire Fence Co., of Anderson, Ind., has decided to build a $75,000 plant for a western branch at Coffeyville, Kan. E. T. Ireland, of this city, will be Mgr. of the new western branch.

HELENA, ARK.—The Business League of Helena, Ark., has made arrangements with the Ford-Johnson Company, of Frankfort, Ky., and Michigan City, Ind., through which there will be established in Helena within a few months an extensive chair-making plant. The new factory will be removed from Frankfort to Helena, and work on the buildings will be commenced as soon as the contracts can be closed.

SPOKANE, WASH.—The Spokane Relish & Catsup Co. will erect a plant here for the manufacture of products from tomatoes. The capital of the company is $50,000. N. O. Harvey and J. H. Wright are members of the company.

TEHACHAPI, CAL.—A new plant for the manufacture of cement will be erected by J. W. Jameson, of this city. Estimated cost, $1,000,000.

LONGUE POINT, QUE.—Graham Fraser, formerly with the Nova Scotia Steel & Coal Co., New Glasgow, N. S., has purchased a site near here and will erect a $65,000 factory for the purpose of manufacturing car wheels.

LACHINE, QUE.—The Manufacturers Cotton Co. will erect a factory here at a cost of about $800,000, if they are granted a bonus of $25,000, and exemption from taxation for 25 years.

NEW LISKEARD, ONT.—It is reported that S. Salmon will erect a grist mill here at a cost of $15,000.

TORONTO, ONT.—The Gerhard Heintzman Piano Co. will erect an addition to its factory here at a cost of about $10,000.

EDMONTON, ALTA.—A. O. Dwyer will erect a large packing plant here at a cost of about $500,000.

VANCOUVER, B. C.—The Hastings Shingle Mfg. Co. will erect a saw mill here at an estimated cost of $40,000.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

STEEL BARS.—Mitchell, Neb.—See under Water Supply and Irrigation.

FIRE HOSE.—New York, N. Y.—Bids are asked until 10.30 a. m., Dec. 27, by Francis J. Lantry, Fire Comr., for furnishing 3,000 ft. 3-in. rubber fire hose.

WATERWAY.—Ottawa, Ont.—It is reported that $25,000 has been appropriated to complete the survey work and cost of a waterway from Montreal to Georgian Bay, via Ottawa.

SUPPLIES.—St. Catharines, Ont.—Bids are asked until Dec. 31, by the Superintending Engineer, Welland Canal, St. Catharines, for furnishing and delivering various articles of timber, castings, etc., for the use of the Welland Canal and its branches for the year 1907.

GREENHOUSES.—Medicine Hat, Alta.—A syndicate of capitalists has been formed for the purpose of erecting greenhouses, to cost $50,000. L. H. Shepley, Winnipeg, Man., is interested.

DUMP SCOWS.—Cleveland, Ohio.—Bids are asked until 2 p. m., Jan. 21, by Major C. McD. Townsend, Corps Engrs., Cleveland, for supplying two dump scows. (Advertised, Engineering News.)

ROCK EXCAVATION.—Toronto, Ont.—Plans are being made for deepening the harbor here by the removal of 1,750,000 cu. ft. of rock, at a cost of $150,000. Address Harbor-Master Postlewaite.

RIVER IMPROVEMENT.—Ottawa, Ont.—The Government has provided $200,000 for improvements to the Red River, Manitoba, to be spent during 1907. Fred. Gelinas is Secy. Dept. Public Works, Ottawa.

SEA WALL.—New York, N. Y.—Bids are asked by J. A. Bensel, Comr. of Docks, until noon, Dec. 28, for building a concrete seawall and platform on piles at the easterly side of North Brother Island, East River.

CRUISER.—Victoria, B. C.—The Dominion Government has provided $225,000 for the construction of a fishery protection cruiser to have headquarters here. F. Gourdeau is Deputy Minister, Dept. Rys. and Canals, Ottawa, Ont.

TUNNEL ENTRANCE.—Boston, Mass.—Bids are asked until noon, Dec. 27, by B. Leighton Beal, Secy. Boston Transit Comn., 15 Beacon St., for constructing an entrance and exit for the Washington St. tunnel, at Franklin St.

DREDGING.—New York, N. Y.—Specifications and bidding sheet for dredging Ambrose Channel, New York Harbor, as advertised, are on file at office of Engineering News, New York, N. Y. Bids are asked until Jan. 8.

ORDNANCE.—Washington, D. C.—The Bureau of Ordnance, War Dept., Washington, has rejected as excessive all bids received Nov. 30, for furnishing 10 and 12-in. projectiles, and also for three 6-in. disappearing gun carriages.

TELEPHONE EXTENSION.—Strathcona, Alta.—The Edmonton City Council has made a proposition to extend its automatic telephone system across the Saskatchewan River to this town if the Council will grant a 20-year franchise.

ORDNANCE.—Washington, D. C.—The Bureau of Ordnance, War Dept., Washington, D. C., has awarded to the MIDVALE STEEL CO., contract for furnishing ten sets of forgings for 3-in. rifle, model 1905. Bids were opened Nov. 30.

PIER.—Nicolet, Que.—Bids are asked by the Department of Public Works, Ottawa, Ont., until Jan. 7, 1907, for construction of a landing pier at Doucet's Landing, Nicolet Co. J. L. Michaud, Merchants' Bank Bldg., Montreal, is Res. Engr.

FIRE ALARM.—Dunkirk, N. Y.—We are officially advised that the Fire and Water Committee have under consideration the installation of an electric fire-alarm system, and definite action is to be taken in January. Lewis N. Murray is City Clk.

FIRE ALARM TELEGRAPH.—New York, N. Y.—Bids are asked until 10.30 a. m., Dec. 27, by Francis J. Lantry, Fire Comr., for furnishing and delivering fire alarm telegraph apparatus and supplies for the Boroughs of Manhattan, the Bronx and Richmond.

SEA-WALL.—Indianapolis, Ind.—The County Commissioners contemplate the erection of a sea-wall along the west side of White River for a distance of about 1¼ miles. Bids for the work will be received about Jan. 1. Estimated cost, $20,000.

UNDERGROUND CONDUIT SYSTEM.—Little Rock, Ark.—The Southwestern Telegraph & Telephone Co. has completed plans for an addition to its underground telephone system by which 30 more underground cables or ducts are to be added. T. L. Powell is Division Supt.

STEAMERS.—Montreal, Que.—The Canadian Pacific Railway Co. will build two steamships in addition to one now being built at the Polson Iron Works, Toronto. These boats will be used for grain, passenger and general cargoes on the Fort William-Owen Sound route.

WHARF REPAIRS.—Fort Slocum (New Rochelle post-office), N. Y.—Bids will be received until Jan. 2, by Capt. E. N. Jones, Constr. Q. M., Ft. Slocum, for making repairs to passenger wharf, freight wharf and trestle and coal-shed.

HARBOR IMPROVEMENTS.—Ottawa, Ont.—The Department of Public Works has voted $300,000, to be spent in harbor improvements here during 1907 and $200,000 to be expended during 1908. The work consists chiefly in deepening the present waterways. Fred. Gelinas is Secy.

CHANNEL.—Houston, Tex.—The Donaldson Wharf & Channel Co., capital $200,000, has been chartered for the purpose of constructing a channel across San Jacinto Bay connecting Morgan's Canal with the main land along the bay shore near what is known as Morgan's Point. T. W. House and James A. Baker, Jr., are incorporators.

WHARF, ETC.—Fort Stevens, Ore.—We are officially informed that contract for the construction of a wharf, approach, wharf shed and slip complete has been awarded to FERGUSON & HOUSTON, of Astoria, Ore. All piling and cross-bracing of wharf to be creosoted. Bids were received Nov. 2. Lieut. A. J. Cooper is Constr. Q. M.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until 10 a. m., Jan. 8, by the Bureau of Supplies and Accounts, Navy Dept., for furnishing at various naval stations and navy yards a quantity of miscellaneous naval supplies. H. T. B. Harris, Paymaster-Gen., U. S. N.

AMUSEMENT PARK.—Ann Arbor, Mich.—The Wolverine Park Co., of Jackson, organized for the purpose of improving Vandercook Lake property, has filed articles of incorporation with the State Secretary at Lansing. The capital stock is placed at $[illegible]000. It is planned to erect pavilions, a [illegible] railroad and all the usual accompaniments of an electric park.

TELEPHONE SYSTEM.—Winnipeg, Man.—At a recent election the ratepayers carried the by-law to provide for a municipal telephone system and all the civic candidates pledged themselves to this end. [illegible] the new Council meets preliminaries will be arranged for the installation of the system. J. H. Ashdown is Mayor; F. E. Cox is City Electrician.

PORT IMPROVEMENTS.—Portage, Mich.—The estimates for river and harbor improvements in and near copper country [illegible] given in Washington dispatches, as follows: Ontonagon Harbor, $5,000; Portage Lake, $20,000; Rock of Ages, $500; Portage Lake lightkeeper's dwelling, $3,500; removing Portage Lake light to pier head, $5,000; Rock Harbor, north shore of Lake Superior, Isle Royale, $821,000.

TELEGRAPHONE SYSTEM.—Montreal, Que.—The Canadian Pacific Ry. Co. has decided to install a telegraphone system along its North Shore Division, and if it proves as satisfactory in use as it has in the tests, the system will be installed along all the company's telegraph wires. By this invention it is possible to either telegraph or telephone over the one wire at the same time without either message interfering with the other.

LUMBER.—Norfolk, Va.—Bids were opened Dec. 11, at the Bureau of Supplies and Accounts, Navy Dept., Washington, for furnishing 700,000 ft. long-leaf yellow pine at the Navy Yard, Norfolk, Va. Bids were as follows: Charles Este Lumber Co., 21st St. and Glenwood Ave., Philadelphia, Pa., $25,750; E. S. Bacon & Sons, Savannah, Ga., $28,000; General Supply Co., Norfolk, Va., $26,695; Watson & Pettinger, Brooklyn, N. Y., $28,350.

SHIP CANAL.—Seattle, Wash.—We are officially advised that bids probably will be received about Jan. 1 for the proposed ship canal and lock connecting Lake Washington, at Seattle, with Salmon Bay. Work will require about 2,500,000 cu. yds. of earth excavation. Estimated cost is $800,000. Archibald O. Powell, Post-Intelligencer Bldg., Seattle, is Ch. Engr. of the project. Hydraulic dredges, steam shovels and cars, etc., will be required.

NAVAL MAGAZINE.—Norfolk, Va.—Bids were opened Dec. 11, at the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., for construction work at the naval magazine, St. Julian's Creek, Va., as follows: Penn Bridge Co., Washington, D. C., Item 1, $24,939; A, $23,339; B, $21,739; Item 2, $1,000; C, $1,075; D, $1,150; Item 3, $900; Item 4, $800. Snare & Triest, 143 Liberty St., New York, Item 1, $31,800; A, $29,650; B, $27,500; Item 2, $1,030; C, $1,080; D, $1,150; Item 3, $500; Item 4, $1,600.

PAINTING FERRYBOATS.—New York, N. Y.—The following bids were received Dec. 17, by J. A. Bensel, Comr. of Docks, for furnishing all the labor and materials required for preparing for and painting the hulls of the municipal ferryboats and department tugboats: James Reilly Repair Supply Co., 299 West St., $30,228; J. Shenan & Son., Foot of East Houston St., $16,900; N. B. Smythe, 1123 Broadway, $32,200; A. Miller & Bros., Jersey City, N. J., $31,800; Monad Engineering Co., 147 Cedar St., $36,050.

CONDUIT, GUIDE AND GUARD CRIBS.—Cincinnati, Ohio.—We are officially advised that the following bids were received Dec. 12, by Maj. J. G. Warren, Corps of Engrs., U. S. Army, Cincinnati, for reconstruction in concrete, conduit, guide and guard cribs, at Lock No. 4, Muskingum River, Ohio: E. J. Landor, Canton, Ohio, $11,943; Louis H. Wendt, Newport, Ky., $23,099; E. A. Patterson, Malta, Ohio, $11,813; Pennsylvania Contracting Co., Pittsburg, Pa., $15,371; Clifton Bros., Durant, Ohio, $9,999; Gregg & Hoffman, Zanesville, Ohio, $10,224.

SUBWAY.—Rochester, N. Y.—The State Railroad Commission has approved of the plan to abolish a grade-crossing by the construction of a subway under the New York Central R. R. tracks at Culver St. The plans for the subway will be prepared by engineers of the New York Central and submitted to the city engineer for approval. The contract for the improvement will be let by the railroad company. It is estimated that the proposed subway will cost $200,000, of which the State will pay $50,000, the city $50,000, and the New York Central Co. $100,000. Edwin A. Fisher is City Engr.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

BRIDGE.—Province of Cagayan, P. I.—Bids are asked until noon, Dec. 20, at the office of J. Carter, Insular Purchasing Agent for the United States, 907 Whitehall Bldg., Battery Pl., New York, for furnishing the superstructure of a steel highway bridge over the Minanca River, Province of Cagayan, P. I.

CANAL.—Panama.—Bids are asked until noon, Jan. 12, by the Isthmian Canal Commission for the completion of the Panama Canal. This is a postponement from Dec. 12. The Commission explains that the postponement is on account of certain changes made at the instance of a number of contractors to the invitation and form of contract required to be executed by the successful bidder.

BUILDING.—Havana, Cuba.—The stockholders of the Havana Produce Exchange have decided to accept the proposal of the Bank of Havana to loan the institution $[illegible]000,000 with which to construct a new building for the exchange. It will be a steel building five stories high, one floor of which will be occupied by the Bank of Havana. The build-

ing will be on the same site as that at present occupied by the Produce Exchange, fronting on the Plaza de San Francisco. The contract will be awarded the firm of PURDY & HENDERSON. Two years are to be allowed for the completion of the work.

RAILROAD.—Manila, P. I.—The Manila Railroad Co. has acquired all the property and franchises and rights of the old Manila Railway Co., which operated the only steam road in the Philippines. The new company is constantly buying American rolling stock, including both cars and locomotives, of a slightly smaller type than those used in this country, as the roads in Manila are of narrow gage.

It is reported that $10,000,000 will be expended by the new Manila Railroad Co. in the construction of new lines during the ensuing year and as the natural growth and development of the Island of Luzon warrant additional extensions, probably $10,000,000 more eventually will be spent in construction and equipment. Speyer & Co., 24 Pine St., New York, are interested.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

RAILWAY.—City of Mexico.—The contract for the construction of the Quirio & Las Cruces Ry. has been let to the MEXICAN FLUME & LUMBER CO. The company will have its head office in the City of Mexico.

WATER WORKS AND SEWERAGE.—Guadalajara, Jal.—Vizcayno Bros., the promoters of the Colonia Moderna, the new residence addition adjoining the City of Guadalajara on the south, will expend $35,000 in waterworks and sewerage in the colony.

RAILROAD. — Linares, Tamaulipas. — The Federal Government has granted the San Carlos Copper Co. an extension of time in which to build an extension of its railroad from San Carlos to Barra de Sandoval or to Soto la Marina, on the Gulf of Mexico coast.

TELEPHONE LINES.—Veracruz.—The government of the State of Veracruz has made a contract for telephone lines to connect the cities of Jalapa, Orizaba, Veracruz and Cordoba. It is intended, in the near future, to extend the new system to various other points in the State.

ASPHALT PAVING.—Guadalajara, Jalisco. —The contract for asphalt paving to be laid during the year 1907, in the City of Guadalajara, Jal., has been awarded to the MEXICAN ASPHALT PAVING CO., represented by Paul Harwood, the engineer who will have charge of the work. About 80 blocks will be paved, and work is expected to commence the first week in January.

WATER POWER.—Indé, Durango.—A concession has been granted the Indé Gold Mining Co., of Indé, Durango, by the Mexican Government, to use water from the Sestine River to develop power. Approximately 1,000 HP. will be utilized, and transmitted by electricity to the mines of the company as well as to surrounding properties in Indé and El Oro. A large dam will be erected. H. D. Crowder is Supt of the company.

IRRIGATION AND HYDRO-ELECTRIC PLANTS.—Camargo, Chihuahua.—A large system of irrigation and a hydro-electric plant are to be established near here by Compania Agricola y de Fuerza Electrica del Rio Conchos. The company will construct a large dam near Camargo for the puprpose of supplying the necessary power as well as water for the irrigating canals. The officers of the company are: Pablo Ginther, of Santa Rosalia, Chihuahua, Pres.; Juan A. Creel, of Chihuahua, Treas., and Joaquin Cortazar, of Chihuahua, Secy.

RAILWAY AND SAW MILLS.—Chihuahua. —The Sierra Madre Land and Lumber Co., the corporation organized for the purpose of handling the lumber properties of Col. W. C. Greene, will issue $3,000,000 in 6% 30-year bonds to secure funds for the construction of the railway from Temosachic on the Chihuahua & Pacific Ry., to the lumber properties situated about 50 miles north of that point, as well as for the construction of saw mills, and lumbering operations. Geo. D. Cook & Co. have undertaken to place the first block of $1,500,000 of the bonds, and probably will handle the full amount.

BEET ROOT SUGAR FACTORIES.—City of Mexico.—M. Fenochio & Co. have deposited $5,000 as a guarantee for carrying out the concession granted by the Department of Fomento for the establishment of beet root sugar factories in the Republic. It is proposed to establish three factories, one in the Federal District, and two at points likely to give favorable results. It is the intention to commence work on one of the factories, probably that of the Federal District, within a few weeks. A representative of the company is now in the United States to purchase machinery for one of the factories.

RAILWAY SUPPLIES AND MINING DEVELOPMENT.—Zacatecas.—Consul-General A. L. M. Gottschalk, of Mexico City, states that the Mexican Government has awarded a contract to G. T. HILBERT, representing G. C. PALMER, of Zacatecas, for the construction of a railroad between Chalchihuitos, State of Zacatecas, to some point on the Mexican Central road in the State of Durango. 12½ miles are to be built during the first two years, and about 12½ miles a year thereafter. This will bring the completion of the line within a period of six years. The company will enjoy for five years the privilege of free importation of materials and supplies. Both this and previous concessions received by Mr. Palmer for new railroad lines in the State of Zacatecas will doubtless have considerable effect upon the development of mining.

RAILWAY.—Oaxaca.—The transfer of the Oaxaca & Ejutla Ry., owned by Luis Garcia Teresi, to the Oaxaca & Pacific Ry. Co., was made Nov. 15. Arrangements for floating bonds to the amount of $2,500,000 at 5% for a term of 50 years, have been completed, the securities being taken by English and French interests. The funds obtained will be used in rebuilding and improving the Oaxaca & Ejutla line, and constructing the first division to Yuchatengo, a distance of about 100 miles. The Oaxaca & Pacific Ry. Co. is capitalized at $40,000,000. It is proposed to construct a line from the City of Oaxaca to Salina Cruz, and up the West Coast of Mexico to Acapulco and Manzanillo, a total distance of 900 miles. Yuchatengo will be the junction for the lines from Salina Cruz, Acapulco and Manzanillo. Among the directors are W. W. Wheatley, Gen. Mgr. of the Mexican City Tramway Co.; Sebastian Comacho, City of Mexico; Laird H. Moffat, Pres. of the Denver, Northwestern & Pacific Ry. Co.; Harold G. Villard, son of Henry Villard of the Northern Pacific Ry. Co. Roswell E. Briggs, City of Mexico, is Vice-Pres. and Ch. Engr. Specifications for material and equipment are now being prepared, and active construction on the first division will be commenced within a few months, as well as a survey of the entire line.

FOREIGN CONTRACTS.

(To insure prompt attention, letters upon consular business should be addressed to the American Consul at ——, ——. Such letters are opened and attended to by the person that may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office the matter may wholly escape attention.)

BUILDING.—England.—The Young Men's Christian Association in London will erect a new building to cost about $1,000,000. Clarence Hooper is Financial General Secy.

FACTORIES.—Germany.—The Krupp Company has decided to increase its capital stock by $5,000,000 and to erect new buildings, to cost about $15,000,000.

WATER-WORKS.—Paraguay.—U. S. Consul Ruffin reports that the award of contract for the construction at Asuncion, Paraguay, of water-works, electric light, and power, has been given to EDUARDO MOELLER, of the Argentine Republic, at about $30,000.

ELECTRIC RAILWAY.—Italy.—The Permanent Committee for Tramway Construction at Gallarate, Italy, has approved the scheme for an electric tramway from Gallarate to Oleggio at an estimated cost of $1,950,000.

PORT WORKS.—Spain.—Official sanction has been given to the expenditure of 274,487 pesetas (about $55,000) on port works at Muros, Province of Coruña. As these works are considered urgent, they will be included in the scheme of improvements to be carried out next year.

WATER SUPPLY.—Brazil.—A project has been approved by the Government for the improvement of the water supply of Rio de Janeiro, which it is proposed to increase by about 98,000,000 litres per day. The cost of the scheme has been estimated at 5,500,000 milreis (about $3,800,000); but this is only a preliminary estimate which must not be considered definite.

At Para or Belem, which is near the mouth of the Para River, PIERSON & CO., a Canadian firm of contractors, which is backed by a New York and Canadian syndicate, is building a docking plant at a cost of $10,000,000, and at Rio de Janiero the Brazilian Government is spending something like $25,000,000 for docks. WALKER & CO., of London, hold the contract for this work.

IRON BEAMS, WIRE, ETC.—Sweden.—Bids are asked by the Registrar, Railway Administration, Stockholm, until Dec. 22, for supplying rolled iron beams to the State Railways at Stockholm, Gothenburg and Norrkjoping.

Bids are asked until Jan. 2, by the Registrar, for supplying nails, 1,100,000 meters of plain galvanized wire, and 500,000 fastenings for fencing for the State Railways.

PORT WORKS.—Brazil.—Brazil has granted to a North American syndicate a concession for building large harbor works at Para, one of the principal commercial centers in Northern Brazil. The President of the company is Percival Farquhar, 80 Broadway, New York, N. Y. Among the Directors are Sir William Van Horne, Montreal, Que.; F. S. Pearson, 25 Broad St., New York; Minor C. Keith, 17 Battery Pl., New York, and William Laneman Bull. The cost of the work will be about $15,000,000.

RAILWAYS.—Chile.—According to the "Revista Comercial," of Valparaiso, the Ministry of Industry and Public Works has approved the following: Plans for construction of a branch railway to connect the Carmen nitrate "officina" with the Antofagasta & Oruro Ry. Plans presented by the Compania de Lota y Coronel for construction of a railway from Lota to Playa Negra. Plans for construction of a branch railway between the Anita "oficina" and the Carmen "oficina." It is also noted that Rodolfo Rothstein has applied for permission to construct a railway from Camarones to the Bolivian frontier.

PORT WORKS MACHINERY.—Belgium.—H. W. Diederich, U. S. Consul-General at Antwerp, advises that some $20,000,000 will be spent on the new Antwerp harbor works during the next eight or ten years. Part of the work includes digging a canal about five miles long, nine docks and several dry-docks, affording openings for the sale of American ditching and dredging machinery, etc. Up to the present these matters are in the hands of Comte de Smet de Naeyer. Mr. Diederich, however, names the largest public-works contractors in Belgium and the largest importer of American machinery. Their addresses can be secured from the Bureau of Manufactures.

TELEPHONE SUPPLIES. — Australia.—Bids are asked until Jan. 9, 1907, by the Postmaster-General, Adelaide, Australia, for the following telegraph and telephone materials: 10,000 No. 5 porcelain insulators, 5,000 No. 8 porcelain insulators, 2,000 No. 8 porcelain insulators, 10 tons hand-drawn copper wire (100 lbs. to the mile), four tons phosphor-bronze wire, five tons galvanized-iron wire (400 lbs. to the mile), one ton galvanized-iron tie wire (60 lbs. to the mile), ten miles No. 18 wire insulated with vulcanized India rubber, 5,000 copper tapes for 100-lb. wire and No. 6 insulators (to be in bundles of 100 each), 5,000 copper binders for 100-lb. wire and No. 6 insulators (to be in bundles of 100 each). Part of order to be placed by Agent-General for South Australia, 1 Crosby Sq., E. C., London, England. Bids will also be received until Jan. 14, by the Postmaster-General at Melbourne, Australia, for 9,000 magneto wall telephone sets.

CHANNEL. — Brazil. — Announcement is made that the Brazilian Government and JAMES STEWART & CO., contractors, Fisher Bldg., Chicago, and New Orleans, are about to close negotiations whereby the contracting firm will be awarded a $10,000,000 contract to dredge a 30-ft. channel through the bar at the mouth of the Rio Grande do Sul, and into the Lake dos Patos, in the extreme southern part of the South American nation. In this matter the Government of Brazil hopes to open the Port of Alegre to the world and to attract shipping that way. The $10,000,000 contract will cover also the cost of constructing docks and wharves at Porto Alegre, the intention of the Government being to make this one of the great ports of the country. Under the terms of the contract with Brazil, James Stewart & Co. will be called upon to dredge a 30-ft. channel through a bar where the depth of the water is now only 8 or 10 ft. This channel will admit vessels from the Atlantic Ocean into Lake dos Patos, and access to Porto Alegre will thus be given. This port is desirably situated at the head of Lake dos Patos, and in the heart of a splendid trading country.

CIVIL SERVICE EXAMINATIONS

INSPECTOR OF FILTER PLANTS.—New York, N. Y.—The Municipal Civil Service Commission, 299 Broadway, announces an examination to be held Jan. 10 to secure an eligible person for the position of inspector of filter plants in New York, at $1,200 a year. Age limit, 21 years. Applications will be received until 4 p. m., Dec. 24.

BACTERIOLOGIST.—New York, N. Y.—An examination will be held on Jan. 8 to secure an eligible person for the position of bacteriologist, at $1,200 a year, in New York. Candidates are expected to have taken a course in bacteriology in some medical college of recognized standing, and also to have had some actual experience in a reputable bacteriological laboratory. Age limit, 21 years. Applications will be received by the Municipal Civil Service Commission, 299 Broadway, until 4 p. m., Dec. 31.

ARCHITECTURAL AND STRUCTURAL STEEL DRAFTSMAN.—San Francisco, Cal.—The U. S. Civil Service Commission announces the postponement to Jan. 9-10 of the examination scheduled for Dec. 5-6, to secure eligibles to fill a vacancy in the position of Draftsman (architectural and structural steel), at $125 a month, in the office of the Engineer, Twelfth Light-House District, San Francisco, Cal., and vacancies as they may occur in any branch of the service requiring similar qualifications. Age limit, 20 years. Application Form 1312.

ELIGIBLES.—Albany, N. Y.—A list is here given of those who have qualified at recent examinations held by the State Civil Service Commission and who are eligible for appointment:

ASSISTANT CIVIL ENGINEERS.—Examination held September 18, 1906.

*Harry F. Kellogg, 87 South Allen St., Albany, N. Y.
*Arthur G. Hayden, 79 North Allen St., Albany, N. Y.
*Sherman W. Belding, Fort Edward, N. Y.
*Harry H. Greene, Syracuse, N. Y.
Richard Hopkins, 349 Clinton Ave., Albany, N. Y.
Charles W. Tarr, 109 Waverly Place, New York.
Harry Shoemaker, Fort Edward, N. Y.
Arthur G. Crysler, 126 Shonnard St., Syracuse, N. Y.
Thomas J. Schoenlaub, 25 Park St., Albany, N. Y.
Wm. H. Snyder, 109 Hartwell Ave., East Syracuse, N. Y.
John B. Winter, Barge Canal Office, Albany, N. Y.
Maurice W. Williams, Goshen, N. Y.
Edward K. Triol, Barge Canal Office, Albany, N. Y.
Geo. H. Briggs, Aspinwall, Pa.
(*Eligibles for promotion.)

RODMEN.—Examination Oct. 19, 1906.

Warren Gardner, 385 Central Park West, New York.
Frank A. Gordon, Barge Canal Office, Rome, N. Y.
LaMonte T. Clarke, Lake Mahopac, N. Y.
Albert W. Thayer, 306 High St., Clinton, Mass.

LEVELERS.—Examination Nov. 17, 1906.

Wilson G. Harger, 18 Arnold Park, Rochester, N. Y.
Stephen B. MacDonald, Arlington Hotel, Rome, N. Y.
James B. Foote, Fort Edward, N. Y.
William R. Headden, 138 12th St., Troy, N. Y.
Arthur L. Northrup, 211 North Seventh St., Olean, N. Y.
James C. Bell, 98 South Swan St., Albany, N. Y.
Elias H. Anderson, 15 Carmine Place, Buffalo, N. Y.
Edward B. Noble, 21 Bradford St., Albany, N. Y.
George C. Andrews, 376 Woodward Ave., Buffalo, N. Y.
Elmer C. Lawton, Lawtons, N. Y.
Prescott D. Hoard, 225 Jefferson Ave., Scranton, Pa.
Rexford J. Lyon, Barge Canal Office, Albany, N. Y.
George W. Bradley, Phoenix, N. Y.
James T. Schuyler, West Shore Depot, Syracuse, N. Y.
Arthur W. Smith, Goshen, N. Y.
Elvin J. Becker, Browns Station, N. Y.
Arthur R. Brown, 25 William St., Hornell, N. Y.
Walter A. Jones, 19 Wall St., New Haven, Conn.
Clark A. Bryan, 114 Decatur St., Cape Henry, N. J.
Ralph G. Gibson, 404 Pearl St., Burlington, Vt.

INDUSTRIAL NOTES.

MR. L. A. WYMAN has accepted a position in the sales department of the Dayton Pneumatic Tool Co., with headquarters at Dayton, Ohio.

HENRY A. HITNER'S SONS have just purchased a large tract of land at Eddystone, N. J., where they intend to erect one of the largest scrap iron places in the country, the great advantage of this new plant being its immense water froot.

THE WEBER STEEL-CONCRETE CHIMNEY CO., Chicago, Ill., reports that its New York office, 507 Singer Bldg., is now under the management of Mr. T. C. Maxfield, the former representative, Mr. Hill, having retired from the employ of this firm.

MESSRS. HAZEN & WHIPPLE, Consulting Engineers, 220 Broadway, New York, have been retained to report upon certain features of the water supply of Brisbane, Australia, and Mr. Hazen sailed on the "Miowera" from Vancouver Dec. 7, to attend to the same. He expects to be away about three months.

THE CENTRAL ELECTRIC COMPANY of Chicago, has contracted with the Allis-Chalmers Company, Milwaukee, for furnishing a 16-in. × 36-in. Allis-Chalmers "Reliance" Corliss Engine, direct coupled to a 250-KW. Allis-Chalmers alternator, with exciter, for the Pullman Company, Pullman, Ill. The alternator is a 2,300-volt, 60-cycle, 3-phase machine.

THE KEYSTONE DRILLER CO., Beaver Falls, Pa., has secured a suite of rooms in the Broadway-Maiden Lane Bldg., 170 Broadway, New York, and has opened an Eastern Sales and Export Office. This move has been necessitated partly by the remarkable growth of sales of Portable Well Drilling Machines in South Africa, South America and Russia, and also by the increase in the volume of business coming directly from the City of New York.

THE ARMORY OF THE 23D REGIMENT, N. G. S. N. Y., in Brooklyn, has been treated with Voltax liquid compound, which is now being extensively used as a waterproofing and fireproofing material. This liquid compound has only recently been placed on the market by the Electric Cable Company, of 17 Battery Place, New York, which has made a number of large sales of this material, both as a colorless and as a colored compound to replace the ordinary waterproofing paints.

THE BUFFALO FORGE CO. reports the following as a partial list of recent sales: Geophysical Labratory, Carnegie Institution of Washington, 50" steel plate fan for forced draft with shaft arranged for sprocket and chain drive. Merchants Electric Light, Heat & Power Co., York, Pa., 90" steel plate steam fan for induced draft driven by a 6 × 6 single vertical double-acting engine. Orange Brewery, Orange, N. J., 100" steel plate pulley fan for induced draft direct-connected to 6 × 6 engine; fan equipped with water-cooled bearings. Iroquois Iron Works, Buffalo, N. Y., 90" pulley fan made of No. 8 gage steel plate for induced draft.

THE BALDWIN LOCOMOTIVE WORKS will erect its own building at the Jamestown Exposition, and will expend in the neighborhood of $100,000 to build their exhibition structure and assemble the exhibit to be placed in it. The site was selected near vthe entrance of the Tidewater Railroad and a short distance from the State's Exhibit building. It will be 225 × 125 ft. in size, and colonial architecture followed in its construction. One of the features of the Baldwin Locomotive exhibit will be four of the latest and most improved types of locomotives, two of which will be in operation, placed on a platform with the wheels slightly elevated from the track.

HENRY A. HITNER'S SONS, dealers in scrap iron and metals, have appointed W. B. Ilko general manager of their New York office, located at 32 Broadway, New York City, where he will be pleased to received any correspondence relating to scrap iron, metals, second-hand machinery, railroad equipment, etc., etc. The above firm are well known in the trade as dismantlers of railroads, buildings, viaducts, bridges, battleships, steamships, etc. Mr. Ilko being well known in the trade generally, will, no doubt, command a good share of this kind of business in New York and vicinity.

THE H. W. JOHNS-MANVILLE CO. will move into a new building at Nos. 55-57-59 High St., Boston. This entire building, which comprises seven floors, will be occupied by the offices, sales and shipping rooms of the company, and will provide every facility for doing business comfortably, conveniently and promptly. Telephones connect with every division of the establishment, and pneumatic tubes for prompt delivery of orders to the shipping room, etc., are being installed. The increase of space provided will enable the company to carry a much larger stock on hand than ever before; and thus meet the steadily increasing demand in the city and vicinity of Boston, and the New England States, for the various products of the company.

THE ARNOLD CO., 181 La Salle St., engineers and contractors, informs us that the new locomotive shop of the Grand Trunk Ry. at Battle Creek, Mich., will include the machine and erecting, boiler, and tank shops under one roof; the building will be 170 × 817 ft., with 25 erecting pits, nine boiler stalls and nine tank stalls. The foundation work has been started. Other buildings of the locomotive department will follow shortly, as the intention is to com-

plete the buildings of this department for operation before the end of 1907. Bids have been received for the boiler and forge shop of the Cleveland, Cincinnati, Chicago & St. Louis Ry. at Indianapolis, and the contract will be let shortly. Work on the power-house, tank shop and the storehouse is being pushed rapidly. The round-house and power-house, coaling pocket, cinder pits, and sand-house of the Kansas City Southern Ry. shops at Pittsburg, Kan., are nearing completion. The complete improvements in addition will include a new 16-pit machine and erecting shop, 30-ton yard crane, transfer table and reinforced-concrete oil-house.

TRADE PUBLICATIONS.

ELECTRIC CRANES.—The Case Manufacturing Co., Cleveland, Ohio. Bulletin No. 22. Paper; 12¼ × 9¼ ins.; pp. 30; illustrated.

The different parts of cranes are described and illustrated, each part being taken up by itself.

ELECTRIC LINE MATERIALS.—Newhall Chain, Forge & Iron Co., 9-15 Murray St., New York City. Catalogue No. 99. Paper; 6 × 9 ins.; pp. 24; illustrated.

This catalogue lists cross arm braces, guy wire clamps, pole steps, etc., etc., for telephone, telegraph and street railway lines.

DUMPING BUCKETS.—G. L. Stuebner Iron Works, Long Island City, N. Y. Catalogue No. 50. Paper; 4 × 9 ins.; pp. 12; illustrated.

The booklet describes the "Excelsior" bottom dumping buckets and enumerates their advantages over other types. A table giving dimensions, price and capacity of buckets is appended.

RHEOSTATS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Circular No. 1,139. Paper; 7 × 10 ins.; pp. 17; illustrated.

Starting and field rheostats are exhaustively treated in this circular. The various details are pictured and described separately, and the arrangement of the rheostats for different methods of control are thoroughly discussed.

PULVERIZERS.—The Jeffrey Mfg. Co., Columbus, O. Catalogue No. 31. Paper; 6 × 9 ins.; pp. 70; illustrated.

Pulverizers and crushers for crushing limestone, dry bone and tankage, grog, or coal, are illustrated and described in this publication. Roll crushers, disintregators, and shredders are also given notice, together with such specialties as dryers, dumping cars, and mixers.

FORGES AND BLOWERS.—Lancaster Forge & Blower Co., Buffalo, N. Y. Catalogue No. 28. Paper; 7 × 6½ ins.; pp. 20; illustrated.

The different styles of hand forges made by this company are described, the principal dimensions and price being given. Hand drills, shears and tire upsetters are also listed.

CAR COUPLERS.—The McConway & Torley Co., Pittsburg, Pa. Cloth; 9 × 12 ins.; pp. 152; illustrated.

This catalogue lists, with number for a guide in ordering, all different styles of Janney couplers and parts. It includes parts for all styles ever manufactured by this company, both old and new design.

ELECTRIC CONTROLLERS.—The Cutler-Hammer Mfg. Co., Milwaukee, Wis. 25 leaflets; 5 × 8 ins.; illustrated.

The controllers treated of in these leaflets are chiefly for use in connection with elevators. Both alternating-current and direct-current controllers are presented. Controllers for printing presses, machine tools, etc., are also illustrated and their principal ratings are given.

TRACK LINING JACK.—The Buda Foundry & Mfg. Co., Chicago. Paper; 6 × 9 ins.; pp. 12; illustrated.

The pedestal of this jack travels on a horizontal bed having a ratchet surface, so that the track can be raised and then shifted horizontally to adjust it in line and surface. Two men with these jacks could, it is said, do the work of the ordinary gang of six or eight men with lining bars.

GAS ENGINES.—The Wellman-Seaver-Morgan Co., Cleveland, O. Paper; 6 × 9 ins.; pp. 16; illustrated.

The Sargent double-acting tandem engine is described in this pamphlet, and the general feature is the method of cutting off the supply of the mixture at varying points of the suction stroke so as to ensure regularity in speed without wasting power.

RAILWAY SUPPLIES.—General Electric Co., Schenectady, N. Y. Bulletins No. 4,465 and 4,467. Paper; 8 × 10½ ins.; pp. 8; illustrated.

One of these bulletins (No. 4,465) is devoted to trolley frogs, their proper selection and location for different services. The other bulletin (No. 4,467) treats of an emergency straight air-brake system for the combined operation of single cars and short trains.

PNEUMATIC TOOLS.—Ingersoll-Rand Co., 11 Broadway, New York. Bulletin No. 2,008. Paper; 6 × 9 ins.; pp. 32; illustrated.

Motor hoists and stationary motors operated by compressed air are illustrated and described in this bulletin. The motors here presented are balanced three-cylinder engines. Tables of sizes and dimensions are given, and the latter pages of the publication are devoted to illustrated part lists on each machine, for the assistance of purchasers in ordering duplicate parts.

HOISTS.—Truxal-Painter Mfg. Co., Chattanooga, Tenn. Paper; 6 × 9 ins.; pp. 8; illustrated.

The hoist here described and illustrated is designed for hoisting brick, mortar, or concrete in wheel-barrows. It is driven by an electric motor or gasolene engine, and operates two platforms, running side by side between guides, one ascending with loaded barrow, the other descending with barrow empty.

DITCHING MACHINES.—The Buckeye Traction Ditcher Co., Findlay, O. Paper; two pamphlets; 6 × 9 ins.; pp. 32; 6 × 8¼ ins.; pp. 28; both illustrated.

Both pamphlets describe the construction, use and advantages of the Buckeye machine; the larger one relates particularly to its use in drainage work, and the smaller one to its use by contractors for sewer and water pipe trenching, etc. Various styles and modifications are shown.

BLOWERS.—B. F. Sturtevant Co., Boston, Mass. Catalogue No. 140. Paper; 6 × 9½ ins.; pp. 147; illustrated.

High-pressure blowers for handling air or gas are discussed in this catalogue, which is the first complete publication on this subject brought out by the company. The high-pressure blowers shown are for creating pressures up to 10 lbs. per sq. in.; they are made in sizes from 5 cu. ft. to over 15,000 cu. ft. capacity. Steam or electricity is the motive power. The direct-connected sets, engine or motor driven, are each built as a unit.

TECHNICAL THERMOMETRY.—The Cambridge Scientific Instrument Co. Cambridge, England. Paper; 8½ × 11 ins.; pp. 62; illustrated.

The thermometric work in connection with determining and recording the temperatures in kilns, furnaces, digesters and other industrial plants requires apparatus of a special character, and this pamphlet describes various instruments and appliances for work of this kind. The application of these to different manufacturing processes are also dealt with, and examples of diagrams of temperature records are given. In addition to descriptions of the apparatus there is much interesting information concerning the subject in general.

GAS PRODUCERS AND GAS ENGINES.—Minneapolis Steel & Machinery Co., Minneapolis, Minn. Paper; 6¼ × 9¾ ins.; pp. 32; illustrated.

The Munzel gas producer and gas engine are of German design, but manufactured in this country by the above company. The producer is of the suction type, and the engine is of the four-cycle type. In addition, the company builds the Wilson pressure producer for use with bituminous coal. The engines and producers are described and testimonials are given.

SMELTING FURNACES. — Allis-Chalmers Co., Milwaukee, Wis. Bulletin 1,417. Paper; 8 × 10½ ins.; pp. 48; illustrated.

Smelting furnaces and accessory equipment are given attention in this publication. These include blast furnaces for lead smelting and copper smelting, water jackets, slag pots, and cars, blowers, and Corliss engines.

In this connection it may also be mentioned that a complete index of all the Allis-Chalmers' publications has recently been issued. The Allis-Chalmers Co. states that within the past fifteen or sixteen months they have covered with new bulletins about 80% of the products they manufacture, and that it has taken nearly eighty publications, averaging 24 pp. each, to do so.

For other Proposal Advertisements see pages 51, 52, 53, 54, of Advertisements and Construction News page 216.

SEWERS.

Cedar Falls, Iowa.

The Sewer Committee of the City of Cedar Falls, Iowa, will receive sealed proposals up to 7.30 p. m. of January 22, 1907, for the construction of storm water sewers, approximately 3,768 feet in length, and varying from 12-in to 36-in. vitrified sewer pipe and from 42-in. to 60-in.; two-ring brick sewer. Bids to be acted upon at that time by the city council, the city reserving the right to reject any or all bids. Plans and specifications are now on file in the office of the City Clerk.

SEWER COMMITTEE OF CEDAR FALLS, IOWA. 25-2t

WATER-WORKS TUNNEL AND INLET.

Gary, Ind.

Sealed bids will be received at the office of the Engineers (1207 Hartford Bldg., Chicago) up to 11 a. m., Tuesday, January 15, 1907, for furnishing all materials and constructing a water-works inlet for the town of Gary; including a six-foot tunnel in clay, approximate length 15,000 ft., one-half of which is to be located beneath the bed of Lake Michigan and the remainder beneath the land; together with shafts, intake and other appurtenances.

Plans may be examined at the office of the Engineers, and specifications obtained by addressing same.

JOHN W. ALVORD,
CHAS. B. BURDICK,
Engineers.

1207 Hartford Bldg., Chicago, Ill. 25-3t

ELECTRIC RAILWAY.

Bisbee, Ariz.

Sealed proposals will be received at the office of the Warren Company, at 2 P. M., Monday, February 4th, 1907, for the preparing of the roadbed and sub-grade of approximately five miles of electric line for the Warren Company, between Bisbee, Arizona, and Warren, Arizona.

Instructions to bidders, specifications, plans and profiles, and other necessary information, can be had upon application.

Plans, specifications and profiles will be sent to competent bidders upon receipt of twenty-five ($25.00) dollars as a guaranty for return of plans. Proposals shall be made upon blanks furnished by the Company, and shall be accompanied by a certified check or surety bond in the sum of ten per cent. of the amount of their bid.

The Warren Company reserves the right to reject any or all bids.

CLEVE W. VAN DYKE,
Manager.

Bisbee, Arizona,
December 10, 1906. 25-4t

PROPOSALS FOR DUMP SCOWS.—U. S. Engineer Office, 813 Prospect Ave., S. E., Cleveland, Ohio, Dec. 21, 1906.—Sealed proposals for Two Steel Dump Scows will be received at this office until 2 p. m., Standard Time, January 21, 1907, and then publicly opened. Information furnished on application. C. McD. TOWNSEND, Major, Corps of Engineers, U. S. A. 25-4t

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